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CONSISTENCY OF VOCATIONAL SELECTION AND RELATIONSHIPS BETWEEN SITUATIONAL AND ATTITUDINAL VARIABLES OF SASKATOON COLLEGIATE MALE STUDENTS

by

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A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

OCTOBER, 1964

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Consistency of Vocational Selection and Relationships Between Situational and Attitudinal Variables of Saskatoon Collegiate Male Students," submitted by Paul Meech Robinson in partial fulfillment of the requirements for the degree of Master of Education.

ABSTRACT

Of major importance to the thesis was the problem of consistency of occupational choice as a determinant of vocational maturity, and the relationship between vocational preference and selected situational and attitude variables. The data were obtained from eight Saskatoon collegiates by means of a questionnaire. The data were recorded on I.B.M. cards and mechanically sorted. Chi square tests of independence in contingency tables, and chi square tests of difference between two independent proportions were used to test the hypotheses. Where it was not possible to use statistical tests, the data were reported as percentages and a trend analysis was carried out.

The results of the study indicate that inconsistency, rather than consistency, characterized the occupational choices of the majority of high school students. Inconsistency in making occupational choices increased during the first three years of high school, and at the grade twelve level a higher percentage of the students was inconsistent than at the grade nine level. Significant relationships were found between: consistency in making choices and the education of the mother, consistency in making choices and university aspirations.

The percentages of students who were undecided, or who did not make vocational choices declined progressively over the four-year high school period. Students exhibited the most indecision in choosing university programs. In terms of the frequency of the replies, technical, science and general cultural occupations, and engineering, science, education and pre-med university programs were chosen by the highest

percentages of students.

The statistical tests employed in the study indicate a number of significant relationships between vocational plans and situational variables. Attendance at a particular school was related significantly to the occupational choices and university aspirations of the students. The educational background of the parents was related significantly to the occupational choices and university aspirations of the students. This finding was particularly evident when the vocational choices of students from homes where the parents had partial or complete grade school educations were compared to the choices of students from homes where the parents had attended university. The occupation of the father was related significantly to the occupational choices and university aspirations of the students.

One attitude variable was related to vocational plans. The ideal orientation of the student related significantly to occupational plans, university aspirations, and the university program the student planned to enter at university.

Certain attitude trends provide some evidence of the increasing realism and increasing concern for capacities suggested by Ginzberg and his associates as being characteristic of adolescent vocational development.

ACKNOWLEDGEMENTS

The writer wishes to express his appreciation to those who assisted him in conducting this study. At all stages, early and late, the writer had the help of his advisor and committee chairman, Dr. W. D. Knill. For his merciless intervention on matters of substance, style and grammar, the writer could not be more grateful. To Mr. H. C. Melsness and Dr. W. D. Dannenmaier goes the writer's thanks for their suggestions and constructive criticism throughout the project.

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CHAPTER I

SIGNIFICANCE OF THE PROBLEM, CONCEPTUAL FRAMEWORK AND DEFINITION OF TERMS USED

I. INTRODUCTION

In this era of rapid technological change many things are happening that affect the role of the school in society. New scientific concepts are emerging. New materials and processes are appearing in industry. New instruments, machines, and process controls are replacing older ones. Occupations are changing rapidly. Significant changes are taking place in the age, characteristics, and spread of the population. These and other changes, not only affect the general educational programs provided by the schools, but perhaps more important, place increased demands upon certain specialized school services. One such service affected by these changes is the vocational guidance service.

If vocational guidance services are to meet the needs of pupils in this rapidly changing world, they must adapt themselves to changing conditions. Vocational information must be in line with technological and social needs. Methods of instruction must be in keeping with the latest and best understanding of how people learn and how they can be counselled most effectively. In brief, there is an urgent need to provide guidance specialists with research-derived information that will aid them in the performance of their function. It is the aim of this study to make a contribution to such a body of information.

II. SIGNIFICANCE OF THE PROBLEM

Providing for appropriate pupil personnel services constitutes one important function of the educational administrator. One such service to be provided is that of vocational guidance and counselling advisement.[1] In making provisions for this service it would appear necessary that the administrator has a rationale for the guidance and counselling services to be implemented in the school program. Pertinent to such a rationale is the concept of vocational maturity.

The concept of vocational maturity implies that an individual will plan his vocation more effectively when he is ready than when, in terms of his vocational development, he is not ready.[2] Therefore, from the administrator's point of view, it would be helpful in implementing vocational and educational guidance programs to be able to ascertain the vocational maturity of students, particularly of those in the adolescent period. Furthermore, if data indicating the vocational behaviour typical at different stages of adolescence were available, atypical vocational behaviour could be recognized more readily. This would be of assistance in identifying those most in need of special help and in diagnostic work with individuals.

The concept of vocational maturity has other important implications for the educational administrator. School systems are so

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[1] R. F. Campbell, J. E. Corbally, Jr., and J. A. Ramseyer, Introduction to Educational Administration (Boston: Allyn and Bacon, Inc., 1962), p. 103.

[2] D. E. Super and P. L. Overstreet, The Vocational Maturity of Ninth-Grade Boys (New York: Bureau of Publications, Teachers' College, Columbia University, 1960), p. 10.

organized that some anticipatory or actual vocational decisions have to be made at the end of junior high school or at the beginning of high school. The individual usually has to decide among different curricula patterns or programs such as matriculation, diploma, or vocational. Other decisions must be made during the high school years, for example, whether to remain in high school, to change programs, to continue education beyond high school. These educational decisions influence the student's subsequent vocational career by limiting future educational and vocational choices. Time is often wasted if unwise educational and vocational choices have been made, necessitating attempts at correction later. It is important to the individual and to society that time and resources not be lost in unnecessary educational or vocational floundering.

In view of these considerations, the administrator must question whether the school system is demanding vocational and educational decisions from the students at a time appropriate to their vocational maturity. It is pertinent to ask whether the adolescent student is ready to make the appropriate decisions typically required at that age. Is his vocational maturity sufficient for him to be able to deal adequately with the choice-making tasks with which he is faced?

To answer these questions, further information concerning the vocational maturity of adolescents is needed. Studies of vocational development can provide data concerning vocational behaviour at different grade levels. When such basic data are available, educators and school administrators will know more clearly whether the educational system as now organized offers appropriate choice-making tasks of its students,

at appropriate times, or whether some revision in educational practice is needed.

Young people should be ready to make the step-by-step choices that are called for as they progress through school, so that the vocational choices that they eventually make will be appropriate for them, conducive to their personal satisfaction and to their success as productive members of society. However, "to attain this goal, more research-derived knowledge of the developmental sequence of vocational behaviour and of the determinants of vocational behaviour is needed."[3]

III. A CONCEPTUAL FRAMEWORK

Until recently vocational guidance has suffered from an absence of discussions of possible theoretical constructs.[4] Of late, however, theorists in this particular field have been directing increasing attention to theories emphasizing a developmental approach. Since a theory of vocational development seemed to encompass most of the major aspects of vocational behaviour which required consideration in this report, it is necessary to clarify the concept of vocational development as a preliminary to including it in the proposed research framework. As a first step in clarifying this concept, a brief resumé of the historical development of this theory is provided. Following this, the theory on which the proposed research is based will be examined.

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[3] Super and Overstreet, *op. cit.*, p. 11.

[4] R. Barry, B. Wolf, *An Epitaph for Vocational Guidance* (New York: Bureau of Publications, Teachers' College, Columbia University, 1962), p. 3.

The ground for the theory of vocational development was explored in the early 1930's in Austria and Germany by Charlotte Buehler and Paul Lazarsfeld.[5]

> Paul Lazarsfeld, in his Jugend und Beuf, reviewed a large number of empirical studies undertaken by European investigators, and concluded that they all suffered from a major methodological error. In general, the investigations had posed the question of why children want to enter certain occupations and professions, and had assumed that a statistical tabulation of simple responses. . .would prove adequate for understanding the factors at work. The approach assumes that the motives that determine behaviour can be studied directly and that the individual is able to select, out of the welter of his experiences, the one or more factors that led him to adopt a particular line of behaviour. However, Karl Buehler's theory of motivation had demonstrated that the statistical analysis of stated reasons or motives for vocational preferences or choices would prove inadequate for studying the choice problem.[6]

Lazarsfeld went on to develop a genetic approach to the problem of choice which entailed the assumption that the final occupational choice could be understood only in terms of the stages of development through which the individual has passed.

Similarly, Charlotte Buehler, after studying biographical data of people both living and dead, and after interviewing residents in a home for the aged in Austria concluded that most people go through corresponding developmental stages at similar chronological ages. Buehler labelled these stages Growth, Exploration, Establishment, Maintenance, and Decline. She theorized that a person's vocational development as well as other aspects of his life fits into this same

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[5] Ibid., p. 10.

[6] E. Ginzberg, S. W. Ginzberg, S. Axelrod and J. L. Herma, Occupational Choice (New York: Columbia University Press, 1951), p. 15.

pattern.[7]

Until 1951, North American writers generally paid little attention to the work of Lazarsfeld and Buehler.[8] Donald Super and Robert Havighurst, both of whom were interested in the developmental approach to vocational choice, were two exceptions. However, in 1951, a cross-disciplinary research team made up of E. Ginzberg, S. W. Ginzberg, S. Axelrod, and J. L. Herma published their research in the book Vocational Choice. It is on the theory and research of Ginzberg and his associates, and the work of D. Super that this study is based.

Ginzberg and his associates traced the process of occupational choice through stages based on the characteristics of choice or the presumed determinants of choice. "According to their point of view, the individual tends to make his choices with emphasis on different factors at different age levels."[9] Their approach was developmental, and was described by them as follows:

> Our basic assumption was that an individual never reaches the ultimate decision at a single moment in time, but through a series of decisions over a period of many years; the culminating impact is the determining factor.[10]

Ginzberg and his associates went on to state that the process of occupational decision-making could be divided into three distinct periods: the period during which an indivudal makes a fantasy choice (between the ages of six and eleven years--approximately); the period of tentative choice (during adolescence); the period of realistic choices (early

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[7] Barry and Wolf, loc. cit. [8] Ibid.

[9] Ginzberg, et al, op. cit., p. 6. [10] Ibid., p. 27.

adulthood).[11]

Since the research reported herein is confined to students of high school age, it is necessary to elaborate on the period of tentative choices. By virtue of their age and limited knowledge and experience, adolescents are unable to make final decisions about occupations.[12] They do not control the multiple variables which play a role in realistic decision-making. Despite this fact, adolescents are forced to make many decisions which have relevance for their ultimate choice. Adolescents must make these decisions, and moreover, they must make them at a time when they cannot be sure about the type of work they would like to follow as their life's occupation.

Although the adolescent is still not fully cognizant of the essential factors that should determine his decision about future occupations, every year he gains greater insight into himself. Super defines this process as the development of the concept of "self."[13] The young person gradually learns more about himself and his world, and part of the maturing process is his increasing ability to consider simultaneously his desires and reality.

Ginzberg stated that the adolescent period can be studied with reference to two criteria: the individual's search for an appropriate basis for his choice, and the factors he takes into account and the way in which he evaluates them.[14] The adolescent may consider his interests

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[11] Ibid., p. 60. [12] Ibid., p. 73.

[13] D. E. Super, J. O. Crites, R. C. Hummel, H. P. Moser, P. L. Overstreet and C. F. Warnath, Vocational Development (New York: Bureau of Publications, Teachers' College, Columbia University, 1957), p. 43.

[14] Ginzberg, et al, op. cit., p. 74.

and these may be used to determine his vocational choice. At a later stage, consideration may be given to his capacity--his competency to carry out a particular choice. Later still, values may enter into his considerations. With increasing maturity the adolescent tries to introduce some stability into this period of flux by adjusting the image of his "future self."

> When the base formerly used for anchoring his occupational choice is no longer satisfactory, he facilitates his adjustment to a new base by introducing changes in his projected role. Throughout these years he constantly narrows the gap between his current role and his future role.[15]

As stated in the foregoing, Ginzberg suggested that the adolescent is influenced by interests, capacities, and values in planning his future vocation. The influence of these factors guides the adolescent in "narrowing the gap" between his current role and his future role. Super, on the other hand, categorized the factors affecting vocational development as follows: role factors, those imposed by society and involving role expectations; personal factors, those originating within or internalized by the individual, including the self concept; and situational factors, economic and social factors which are external to the individual and over which he has no direct control.[16] It was of particular interest to this research to examine the relationship between vocational development and certain selected factors: personal attitudes, and the situational factors of school, grade, father's education, mother's education, and father's occupation.

Having examined the concept of vocational development during the

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[15] Ibid., p. 74. [16] Super, et al, 1957, op. cit., p. 49.

adolescent period, the logical next step would appear to be the examination of the concept of vocational maturity. The appropriate question that seems now to arise is: How mature is the vocational development of the adolescent? Before this question can be answered, maturity must be defined.

Generally, maturity has been described by contrasting the behaviour of adults with that of children and adolescents. The basic assumption is: "If development is relatively normal, then maturity increases until the individual becomes an adult. Adulthood is viewed as the end point in the process of maturing."[17] However, as Super pointed out, there is a major fallacy in this point of view. The processes of growth and learning do not cease with adulthood. New developmental tasks are encountered. Changes do take place in the individual.[18]

If adulthood is not an appropriate criterion, then what is the point of reference in evaluating the maturity of behaviour? In the case of vocational maturity, Super has suggested that the evaluation of vocational maturity can be based on the behavioural repertoire which the individual has available for coping with developmental tasks with which he is dealing.[19] This criterion focuses on the methods of handling the developmental tasks.

> The advantage of thus formulating the criterion of maturity is that one avoids problems arising from an arbitrary standard which does not take into account continuing development after the entry into adulthood.[20]

By so defining vocational maturity, it is necessary to ascertain

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[17] Ibid., p. 56. [18] Ibid. [19] Ibid., p. 57. [20] Ibid.

the kinds of vocational behaviour typical of persons at different age levels within a life stage such as that of adolescence. In the absence of previous attempts to define vocational maturity, the "Career Pattern Study" under the direction of Super developed a rationale for the measurement of vocational maturity, concentrating on dimensions which should be applicable during adolescence.[21]

> Viewing adolescence as an exploratory stage, in which the major sub-stages have been defined by Ginzberg and his associates as the tentative and realistic, it was postulated that this stage of vocational development is characterized by: increasing orientation to vocational choice; increasing amounts of vocational information and more comprehensive and detailed planning; increasing consistency of vocational preference; the crystallization of traits relevant to vocational choices; and consequently increasing wisdom of vocational preference.[22]

Of practical concern to this study was the dimension of consistency of vocational preference. Are adolescent students consistent in making their vocational preferences? In referring to the "Career Pattern Study" Super noted:

> Consistency of vocational preference seemed worthy of consideration as a dimension of vocational maturity because greater maturity should result in a narrowing of goals, in the elimination of the less attractive preferences, and in the crystallization of preferences which have stood the tests of exploration and trial.[23]

How is consistency indicated? For the purposes of this study consistency was indicated by the naming of more than one occupation as preferred while remaining consistent as to the preferred field of work.

In summary, vocational choice is considered as a developmental

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[21] Super and Overstreet, op. cit., p. 187. [22] Ibid.

[23] Super, et al, 1957, op. cit., p. 188.

process encompassing three life stages. In this research only the tentative stage which encompasses the adolescent period is considered. During the tentative stage, the vocational development of the individual is influenced by a number of factors. Situational and attitude factors were analyzed in this research as they related to vocational choice. One criterion used to measure vocational development is vocational maturity. In order to establish the existence of vocational maturity, certain determinants have been selected by theorists. One such determinant is consistency of vocational preference. In this study, consistency as indicated by choosing two occupations as preferred while remaining consistent as to the preferred field of work, was used as a determinant of vocational maturity.

IV. PROBLEMS

The following are the problems which were considered in the study. In each case, the respondents were controlled by grade levels.

1. Are the occupational choices of adolescents related to: father's education, father's occupation, mother's education; attitudes, ideal orientation, job expectation, job aspiration, achievement motivation, achievement orientation?
2. Are adolescents consistent in choosing two occupations from the same occupational group?
3. Is the consistency/inconsistency with which adolescents make their occupational choices related to the selected variables?
4. Are adolescent plans to attend university related to the selected variables?

5. Are the preferred university programs of adolescents related to the selected variables?

V. HYPOTHESES

This study was structured around two broad hypotheses; on the one hand, it was hypothesized that as a student progresses through high school he becomes increasingly mature in making his vocational selections. On the other hand, it was hypothesized that the vocational selections made by the student are related to certain situational variables over which the student may have little or no control.

Having established these two hypotheses, the next step was to develop ten specific hypotheses, derived from the theory and the related literature, that could be tested statistically. The hypotheses are as follows:

1. The proportion of grade nine students who make two occupational choices from the same occupational group differs from the proportion of grade twelve students who make two occupational choices from the same occupational group.
2. The proportion of consistent students who come from homes where the parents had a partial or complete grade school education differs from the proportion of inconsistent students who came from this type of home.
3. The proportion of consistent students who plan to attend university differs from the proportion of inconsistent students who plan to attend university.
4. The proportion of consistent students who are science oriented

differs from the proportion of inconsistent students who are science oriented.

5. The grade level of the student is related to his vocational plans.
6. The school attended by the student is related to his vocational plans.
7. The educational backgrounds of the parents are related to the student's vocational plans.
8. The occupation of the father is related to the student's vocational plans.
9. The ideal orientation of the student is related to his vocational plans.
10. As the student progresses through high school he tends to show more concern for his capacities, values, and realism in making his vocational decisions.

VI. ASSUMPTIONS

1. This study is a cross-sectional survey, and any inferences drawn from the data are legitimate only for this group at this point in time. However, the most intriguing questions that the research writer wanted to ask related to changes and shifts in behaviour and attitudes in the high school population, as they moved through high school. Thus the data were examined as if they were drawn from a longitudinal study, and inferences were drawn based on the assumption that the high school students in the four grades have the same "potential" over a period of four years. It was assumed that what was observed was the same as

could be found if this study were conducted over a four-year period by following the same groups of students through their high school years.

2. It was assumed that consistency of vocational preference is indicative of vocational maturity.

VII. LIMITATIONS

1. Given the major assumption that the data can be considered as being longitudinal, it is important to note that this cross-sectional study cannot ascertain whether the differences that may exist between students and grades are related to a change in student behaviour, or are the result of "sifting" or "screening" of students that goes on over a period of time.
2. The major assumption limits the relevance of the results to the groups as a whole and not necessarily for any individual within various groups.
3. The theory of vocational maturity suggested that there were five determinants of vocational maturity. Given the nature of the data used in this study, only one of these, vocational consistency was used as the determinant of vocational maturity. Any statements made in the study concerning vocational maturity must be considered in the light of this limitation.
4. The theory of vocational development suggested that there were at least three types of variable influencing vocational choice. Given the nature of the data used in this study only two specific variables: situational and attitude were used. An awareness of

this limitation should prevent a narrow interpretation of the factors influencing vocational choice. Undoubtedly, there were other factors at work, but these were not incorporated into this study.

VIII. DELIMITATIONS

1. No claim is made for the universality of the statements that will be made in this report. It is necessary to delimit the statements to the male adolescents attending high school in one western Canadian city. The fact that the occupational data was coded using the Roe "Occupational" classification and that this classification is more applicable to boys than to girls was a determining factor in delimiting the sample to male students.

IX. DEFINITION OF TERMS

1. Adolescence. The period in the life of a person when the society in which he functions ceases to regard him (male or female) as a child and does not accord to him full adult status, roles, and functions.[24] Herein, adolescence refers to the life stage of the individuals attending high school.
2. Attitude. An attitude may be defined as a manner of acting, feeling, or thinking that shows one's disposition toward an object. Herein, attitude refers to the adolescent's disposition toward vocations as this disposition is revealed through responses

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[24] A. B. Hollinshead, Elmtown's Youth (New York: John Wiley and Sons, Inc., 1959), p. 6.

to certain questionnaire items.

3. Consistency. Consistency may be indicated by the naming of two occupations within the same occupational group within a given grade level.[25]
4. High School. High school is the term used herein to designate the four-year period from grade nine to grade twelve.
5. Occupation. Occupation may be defined as a category in the social structuring of work. Herein, occupation refers to the categories of work activity as suggested by the Roe "Occupational" Classification.
6. Vocation. Vocation is used in a broad sense to include both occupations as defined above, and university plans and programs.
7. Vocational Maturity. Vocational maturity is defined in terms of the consistency with which groups of individuals make their vocational choices.

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[25] Super, et al, 1957, op. cit., p. 61.

CHAPTER II

REVIEW OF RELATED LITERATURE

I. INTRODUCTION

The purpose of this chapter is to review the literature that related specifically to the study. Only a limited number of studies have been reported in the field of vocational maturity. Almost without exception such studies stemmed from the research of Donald Super and his associates. On the other hand, considerable research has been reported in the field of vocational development with particular emphasis on the variables relating to vocational choice. A review of these studies pointed up the apparent existence of a multi-dimensional picture. No attempt was made to deal exhaustively with all of the variables that enter this picture. Only those variables relating to the study at hand have been included in this chapter.

II. VOCATIONAL MATURITY

Prior to the work of Super and his associates, Fryer reported research in which he considered the consistency with which students made vocational choices over a period of time.[1] Fryer's major problem was to establish how much reliance could be placed upon statements of vocational interest made by students. He suggested that an answer to this problem

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[1] D. Fryer, The Measurement of Interest (New York: Henry Holt and Company, 1931), pp. 145-168.

could be of use in determining the predictive value of stated vocational interests. The consistency of vocational interests was measured by determining the degree of general occupational "likeness" between the different educational periods; elementary, high school and college, and existing throughout the three periods. The interests expressed by the students were classified into thirty-two functional occupational groups. When a student was found to have expressed for a given period a vocational interest similar to that expressed for another period, he was rated as having 100 per cent consistency between the two periods. Fryer concluded that there was a degree of resemblance of vocational interests between the periods considered, but little statistical evidence was offered in support of this conclusion.

A more refined study of the consistency of vocational choice was made by Holden.[2] Influenced by Super's theory, Holden completed a study of 109 members of a grade eight class over a three-year period. Although a variable was employed that was not incorporated into the present study, his research did indicate an useful approach to the problem of consistency. At the grade eight level Holden interviewed the students and secured information relating to university plans. Similar interviews were carried out when the same students reached the grade eleven level. From the collected data, Holden sought information pertaining to two problems: the consistency of university aspirations over the three-year period; and the possible identification of consistent/inconsistent students. In order to try and answer the second

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[2] G. S. Holden, "Scholastic Apptitude and the Relative Persistence of Vocational Preference," Personnel and Guidance Journal, XL (September, 1961), 36-41.

problem the students were controlled by their intelligence quotients. His findings showed that students generally were inconsistent. A lower percentage of the students at the grade eleven level planned to enter a four-year university program than was the case at the grade eight level. Conversely, a higher percentage of grade eleven students planned to enter occupations that did not require post-high school education. The findings with respect to the identification of consistent/inconsistent students showed that the students having the highest intelligence quotients were consistent in their university plans over the three-year period. On the other hand, the university aspirations of students having intelligence quotients ranging from 85-109 declined significantly over the three-year period. Among these students having intelligence quotients ranging from 85-94, the percentage of students planning no post-high school education climbed from 0 to 67 per cent over the three years. Holden's major conclusion was that only those students with high intelligence quotients exhibit consistency of vocational choice over a period of time.

A study of Wisconsin high school students by Schmidt and Rothney aimed to determine the consistency of vocational choice over a three-year period.[3] The results of their longitudinal study showed that 65.1 per cent of the students changed their vocational plans at least once during the period. The remaining 34.9 per cent of the students expressed the same choice each year throughout high school. No attempt

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[3] J. L. Schmidt and J. W. M. Rothney, "Variability of Vocational Choices of High School Students," Personnel and Guidance Journal, XXXIV (November, 1955), 142-146.

was made in the study to identify the consistent/inconsistent students.

The problem of trying to identify consistent/inconsistent students was raised by Super.[4] He suggested that the socio-economic background of the student may be related to consistency of choice and thus to vocational maturity. However, Super noted that little research has been carried out in this particular respect.

III. VOCATIONAL DEVELOPMENT

Situational Variables

The importance of such variables as the educational backgrounds of the parents, and the occupation of the father as these related to vocational choice was suggested by Tiedeman and O'Hara.[5] In their general ranking system of variables relating to vocational choice, the circumstances of rearing as a child, including socio-economic status, were regarded as being of prime importance.

Hollingshead demonstrated the importance of socio-economic factors in his sociological study, Elmtown's Youth.[6] Employing chi square tests of significance, Hollingshead concluded from his analyses that socio-economic status plays an important role in structuring an adolescent's educational, social and vocational behaviour.

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[4] D. E. Super and P. L. Overstreet, The Vocational Maturity of Ninth-Grade Boys (New York: Bureau of Publications, Teachers' College, Columbia University, 1960), p. 79.

[5] D. V. Tiedeman and R. P. O'Hara, Career Development: Choice and Adjustment (New York: College Entrance Examination Board, 1963), p. 78.

[6] A. B. Hollingshead, Elmtown's Youth (New York: John Wiley and Sons, Inc., 1959), pp. 286-87 and p. 469.

Ezell and Tate examined specifically the relationship between the educational backgrounds of the parents and the university plans of the children.[7] A positive relationship was established between the high school graduation of the parents and the university aspirations of their adolescent offspring.

A more general study of the relationship between parents' education and their children's university plans was made of grade thirteen Ontario students.[8] The findings were congruent with those reported by Ezell and Tate.

A number of studies have demonstrated a relationship between the occupation of the father and occupational choice. Stephenson studied the occupational aspirations of grade nine students and found that when students were controlled by their father's occupation a close relationship existed between the two variables.[9] Krippner found that the father's occupational level was significantly related to occupational aspirations.[10] He concluded that the majority of students aspired to occupations at or near their parents' occupational levels. The research reported by Krozer and Louttit was somewhat similar to that reported by

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[7] L. B. Ezell and H. H. Tate, "High School Students Look to the Future," Journal of Educational Research, XLIX (November, 1955), 217-222.

[8] W. G. Flemming, Ontario Grade Thirteen Students: Who Are They and What Happens to Them (Toronto: Department of Educational Research, Ontario College of Education, University of Toronto, 1957), p. 21.

[9] R. M. Stephenson, "Occupational Aspirations and Plans of Ninth Graders," Journal of Educational Research, XLIX (September, 1955), 27-35.

[10] S. Krippner, "Junior High School Students' Vocational Preferences and The Parents' Occupational Levels," Personnel and Guidance Journal, XLI (March, 1963), 590-595.

Krippner. Employing an occupational scale that permitted the assigning of occupations to levels, they found that the students from homes where the father was employed in a "high" level occupation (primarily the professions) tended to be more frequently influenced by their father's occupation than was the case among students from homes where the father was employed in a "low" level occupation (primarily labor occupations). It was concluded that only a very small number of boys from the homes of fathers employed in "low" level occupations desired to follow their fathers' occupations.

The relationship between the type of school that the student attends and occupational choice was examined by Lipsett.[11] Pertinent to this study was his finding that attendance at a vocational school tended to limit the occupational aspirations of the students. Vocational students tended to be influenced by their training in making their occupational selections. In this respect, the vocational student did not appear to aspire to occupations requiring training beyond that which he received in the vocational school.

Attitude Variables

The ideal orientation of students was studied by Coleman.[12] The replies to the question, "If you could be any of these things (athlete, jet pilot, missionary, scientist) that you wanted, which

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[11] L. Lipsett, "Social Factors in Vocational Development," *Personnel and Guidance Journal*, XL (January, 1962), 432-437.

[12] J. S. Coleman, *The Adolescent Society* (New York: The Free Press of Glencoe, 1961), pp. 27-28.

would you most want to be?" showed that the first two choices of adolescent boys were, respectively, athlete and jet pilot. The scientist and the missionary were, respectively, the third and fourth choices. In view of these findings, Coleman stated:

> The results show strikingly the way in which the adolescent culture departs from the educational norm: the nationally famous athlete leads, the atomic scientist is a poor third after the jet pilot, and the missionary is almost neglected. The shifts over the period of the school year are little if any. . . .It is striking that in every school the nationally famous athlete and the jet pilot were first and second in popularity.

Few studies were found that attempted to relate specific attitudes with vocational development. Ginzberg's theory of the attitudes characterizing vocational development during the adolescent period reported in Chapter I, provided a useful approach to this problem. A study reported by Miller did show that the frequency with which attitudes of security, career satisfaction, prestige and social rewards received highest scores was related to the fact of expressed occupational choice.[13] However, Miller did not attempt to determine whether or not particular attitudes were related to particular occupational selections.

IV. SUMMARY

A review of studies relating to consistency of vocational choice showed that adolescent career choice was characterized by inconsistency in the highest percentage of cases. The results of one study indicated that a high intelligence quotient was related to consistency in planning

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[13] C. H. Miller, "Occupational Choice and Values," Personnel and Guidance Journal, XXXV (December, 1956), 244-246.

to attend university. Further research in the area of attempting to identify consistent and inconsistent students was not available.

Several studies have shown a relationship between situational variables and occupational choice. Generally, these studies were confined to establishing overall relationships between two variables rather than specific relationships that may exist.

The research available in the field of attitudes and choice was limited insofar as it was specifically related to the purposes of this study.

CHAPTER III

THE RESEARCH DESIGN

I. INTRODUCTION

The research was based on data gathered in the "Saskatoon High School Study." The data were gathered in 1962 by W. D. Knill, who was at that time Assistant Professor at the College of Education, University of Saskatchewan.

II. THE SAMPLE

At the time the data were gathered approximately 4,900 students were in attendance at the nine collegiates in Saskatoon. Of the nine schools, one was a girls' parochial school and was excluded from the present study. The remaining eight schools were coded alphabetically as follows:[1]

School "A" was a new collegiate built four years prior to the time when the data were gathered. The students attending this school came from the homes of sales and service workers, university personnel of the lower echelons, commuting farmers, school teachers and semi-professionals.

School "B" was an older collegiate located in an area circumjacent to the business and industrial areas of Saskatoon. The student

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[1] W. D. Knill, "Television and the High School Student" (submitted to the Canadian Education Association, 1963). (Mimeographed.)

clientele was drawn from the homes of "working class" citizens.

School "C" was located in the oldest established residential district. Here were located the major business districts and industries of the city. The student clientele represented a wide range of social class.

School "D" was located in a more recently developed residential area. The students attending this school came from the homes of "working class" citizens.

School "E" was located in the university area of the city. The students came from the homes of the older, wealthier families of the city. A high proportion of the students came from the homes of citizens employed in the professions.

School "F" was a private boys' parochial school located near the business district of the city. The student clientele was drawn from the entire city.

School "G" was a technical school which offered both technical and academic courses. The student clientele was drawn from the entire city.

School "H" was a new collegiate opened the same year as that in which the data were gathered. The students attending this school came from a "middle class" population similar to that of school "A".

From the questionnaires administered to the students attending these schools, a fifty per cent random sample was drawn. The answer sheets were ordered by room, grade, and school, and every second answer sheet was drawn to make up a sample of 2,159 students of both sexes. For the purposes of the present study a sub-sample consisting of the

total number of boys included in the original fifty per cent random sample was selected to provide the data. Tables I and II show the school and grade distribution of the 1,095 male students included in the sample.

III. THE INSTRUMENT

The questionnaire used to elicit the required data included ninety-six items designed to collect demographic data, information pertaining to the students' school and home activities, students' evaluation of their school situation, and their vocational aspirations. Two lengthy sections attempted to elicit some expression of students' values and attitudes.

For the purposes of the study fifteen of the ninety-six items were pertinent. A copy of the questionnaire items employed in the study is included in Appendix A.

IV. COLLECTION OF THE DATA

The questionnaire was administered to the students in the aforementioned schools within a period of two months. The students were asked to complete the questionnaire within one class period--40 to 45 minutes in all schools.

The students placed their responses on a specially prepared answer sheet which had a detachable name slip. The slip was completed and handed in separately which permitted a check of the students who had participated. The completed answer sheet was placed in an unmarked envelope and sealed. This permitted anonymity and encouraged elicitation

TABLE I

MALE HIGH SCHOOL STUDENT ENROLLMENT BY SCHOOL: BY PERCENTAGES

School	Percentage of the sample	Number of respondents
A	14.6%	159
B	13.9	151
C	9.7	106
D	12.1	133
E	12.7	139
F	10.9	120
G	16.4	182
H	9.7	105
Totals	100	1,095

TABLE II

MALE HIGH SCHOOL STUDENT ENROLLMENT BY GRADE: BY PERCENTAGES

Grade	Percentage of the sample	Number of respondents
9	30.9%	339
10	29.4	322
11	21.5	236
12	18.2	198
Totals	100	1,095

of franker responses.

V. TREATMENT OF THE DATA

Certain questionnaire responses such as those relating to occupational choice required coding. A modified version of the Roe "Occupational" classification was used to code the data as follows: (S) service, (Og) organization, (T) technical, (O) outdoors, (Sc)science, (Gc) general cultural, (A) artistic, (La) labor. The Roe classification normally includes a "business" category and excludes the "labor" category.[2] However, in view of the type of data obtained by the questionnaire the "business" category was included under organization and the "labor" category added to the usual Roe classification. In all other respects the Roe classification, which focuses on the activity in the occupation, was suitable for the purposes of the study.

The university data were coded in two ways: (a) plans to attend/ not to attend university and undecided; (b) university programs, undecided, liberal arts, science, education, business, engineering, agriculture, pre-med, pre-law.

After the data were coded on the answer sheets, this data, as well as the data from the other questionnaire items pertinent to the study, were recorded on I.B.M. cards and mechanically sorted. The results were tabulated, both in percentages, and as observed and expected frequencies. Tables were constructed for each of the areas under consideration. These have been reproduced and included in this report in

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[2] A. Roe, The Psychology of Occupations (New York: John Wiley and Sons, Inc., 1956), p. 151.

cases where statistically significant differences at, or beyond, the .05 level occurred as determined by testing the data, or where they may otherwise be of special interest.

Since the data used in the study were ordinal in nature, non-parametric statistics were used. The chi square test of independence in contingency tables was used to test for significant relationships between the situational and attitude variables, and vocational choice. To test the significance of difference between proportions in any particular instance, the proportions were set out in two by two contingency tables, and a chi square calculated; a chi square significant at, or beyond, the .05 level was accepted as probably indicative of a real difference attributable to factors other than chance.

Where it was not possible to use statistical tests, the data were reported as percentages, and a trend analysis was carried out.

CHAPTER IV

TREATMENT AND ANALYSIS OF DATA (PART I)

I. INTRODUCTION

The data elicited by the fifteen questionnaire items were recorded on I.B.M. cards and mechanically sorted. The resultant totals were then recorded in tables for each of the areas given consideration in the study. The percentages of total responses for each respondent group with respect to the vocational choices that were made were calculated and similarly recorded. Comparisons of the responses of different groups of students when controlled by specific variables were thus made possible through examination and comparison of the percentage entries in the table. As a next step, contingency tables were prepared and chi square tests applied where such a procedure was warranted for the purposes of the study.

In this chapter, observations of the data after tabulation and treatment are reported. Tables have been reproduced and included for the data relevant to the consistency of occupational choices made by the male high school students. Tests of the significance of the difference between proportions were reported at, or beyond, the .05 level.

II. VOCATIONAL MATURITY

For the purposes of the study, vocational maturity was defined in terms of the consistency with which two occupational choices were

made by the students from the same occupational group. At each grade level the students were asked to state two occupational preferences. A student who made two choices from the same occupational group was termed consistent. A student who made two choices from different groups was termed inconsistent. This section reports the findings with respect to the consistency/inconsistency with which the students made their two occupational choices over the four-year high school period.

Consistency/Inconsistency of Occupational Choice

Of the 887 high school students who stated two occupational choices, 234, or 26.4 per cent, chose two occupations from the same occupational groups. The number of students who were inconsistent in their choices, i.e., chose two occupations from different occupational groups, was 653 or 73.6 per cent.

It was hypothesized that the proportion of grade nine students who made two occupational choices from the same occupational groups would be significantly different from the proportion of grade twelve students who made two occupational choices from the same occupational groups. Table III shows the distribution of consistent students over the four-year high school period.

At the grade nine level seventy-nine out of 254 students or 31.1 per cent were consistent. At the grade twelve level forty-seven out of 175 students or 26.9 per cent were consistent. Although the proportion of consistent grade nine students was higher than the proportion of consistent grade twelve students, a test of the significance of difference between proportions failed to reveal a statistically significant difference.

TABLE III

CONSISTENT HIGH SCHOOL STUDENTS: BY PERCENTAGES

Grade	Percentage of consistent students	Number of respondents
9	31.1%	254
10	25.1	274
11	21.2	184
12	26.9	175

NOTE: The percentages of consistent students were calculated on the basis of the number of respondents who made two occupational choices at each grade level.

Similar tests were applied to the proportions of consistent grade nine and ten students: grade nine and eleven students; and grade ten and twelve students. A significant difference between proportions was found between the proportion of grade nine students who were consistent and the proportion of grade eleven students who were consistent. The obtained chi square of 5.32 is significant at the .05 level. The proportion of grade nine students who were consistent (seventy-nine outl of 254 students or 31.1 per cent) was higher than the proportion of grade eleven students who were consistent (thirty-nine out of 184 students or 21.2 per cent).

III. SELECTED VARIABLES AND VOCATIONAL MATURITY

In this section the findings are presented with respect to the relationships between selected variables and consistency/inconsistency of occupational choice.

Parent's Education

It was hypothesized that the proportion of consistent students who came from homes where the father had a partial or complete grade school education would differ significantly from the proportion of inconsistent students who came from homes where the father had a partial or complete grade school education. Table IV shows the percentages of consistent/inconsistent students who came from this type of home background.

TABLE IV

EDUCATIONAL BACKGROUND OF THE FATHERS OF CONSISTENT/INCONSISTENT STUDENTS: BY PERCENTAGES

Students	Grade School Education	Number of respondents
Consistent	39.7%	234
Inconsistent	38.1	653

Although the proportion of consistent students who came from homes where the father had a partial or complete grade school education was higher than the proportion of inconsistent students who came from this type of home, a test of the significance of difference between proportions failed to reveal a statistically significant difference.

It was hypothesized that the proportion of consistent students who came from homes where the mother had a partial or complete grade school education would differ significantly from the proportion of inconsistent students who came from homes where the mother had a partial or complete grade school education. Table V shows the percentages

of consistent/inconsistent students who came from this type of home background.

TABLE V

EDUCATIONAL BACKGROUND OF THE MOTHERS OF CONSISTENT/INCONSISTENT STUDENTS: BY PERCENTAGES

Students	Grade School Education	Number of respondents
Consistent	42.7%	234
Inconsistent	29.1	653

The proportion of consistent students who came from homes where the mother had a partial or complete grade school education was 100 out of a total of 234 students or 42.7 per cent. The proportion of inconsistent students who came from homes where the mother had a partial or complete grade school education was 190 out of a total of 653 students or 29.1 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 13.68 is significant at the .001 level. The proportion of consistent students who came from homes where the mother had a partial or complete grade school education was higher than the proportion of inconsistent students who came from this type of home background.

University Plans

It was hypothesized that the proportion of consistent students who planned to attend university would differ significantly from the proportion of inconsistent students who planned to attend university. Table VI shows the percentages of consistent/inconsistent students who

planned to attend university.

TABLE VI

UNIVERSITY PLANS OF CONSISTENT/INCONSISTENT STUDENTS: BY PERCENTAGES

Students	Planned to Attend	Number of respondents
Consistent	52.6%	234
Inconsistent	64.4	653

The proportion of consistent students who planned to attend university was 123 out of a total of 234 students or 52.6 per cent. The proportion of inconsistent students who planned to attend university was 421 out of a total of 653 students or 64.4 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 15.4 is significant at the .001 level. The proportion of inconsistent students who planned to attend university was higher than the proportion of consistent students who planned to attend university.

Science Orientation

It was hypothesized that the proportion of consistent students who were science oriented, as this orientation was indicated by their responses to the questionnaire item on Ideal Orientation, would differ significantly from the proportion of inconsistent students who were science oriented. Table VII shows the percentages of consistent/inconsistent students who chose science as an ideal occupation.

Although the proportion of consistent students who were science

TABLE VII

SCIENCE ORIENTATION OF CONSISTENT/INCONSISTENT STUDENTS: BY PERCENTAGES

Students	Science Oriented	Number of respondents
Consistent	26.5%	234
Inconsistent	23.2	653

oriented was higher than the proportion of inconsistent students who were science oriented, a test of the significance of difference between proportions failed to reveal a statistically significant difference.

IV. SUMMARY OF FINDINGS

1. The percentage of high school students who were inconsistent in their occupational choices was higher than the percentage of students who were consistent.
2. No statistically significant difference was found between the proportion of grade nine students and the proportion of grade twelve students who were consistent in their occupational choices.
3. The proportion of grade nine students who were consistent in their occupational choices was significantly different from the proportion of grade eleven students who were consistent. A higher proportion of grade nine students were consistent.
4. No statistically significant difference was found between the proportion of consistent and inconsistent students who came from homes where the father had a partial or complete grade school education.

5. The proportion of consistent students who came from homes where the mother had a partial or complete grade school education was significantly different from the proportion of inconsistent students who came from this type of home background. A higher proportion of consistent than inconsistent students came from homes where the mother had a partial or complete grade school education.
6. The proportion of inconsistent students who planned to attend university was significantly different from the proportion of consistent students who planned to attend university. A higher proportion of inconsistent students planned to attend university than was the case with respect to the consistent students.
7. No statistically significant difference was found between the proportion of consistent students who were science oriented and the proportion of inconsistent students who were science oriented.

CHAPTER V

TREATMENT AND ANALYSIS OF DATA (PART II)

I. INTRODUCTION

The purpose of this chapter is to present the findings with respect to relationships between vocational choices made by male high school students and selected situational variables: grade, school, father's education, mother's education and father's occupation.

The data were tabulated as percentages, and as observed and expected frequencies where the latter procedure was required for the purposes of applying tests of independence. Tests of the significance of the difference between proportions were applied whenever such a procedure seemed to be warranted.

II. GRADE DISTRIBUTION OF VOCATIONAL CHOICE

In this section the distribution of vocational choices made by the students at each of the four high school grade levels are reported.

Occupational Choice by Grade

Table VIII shows the percentages of students who selected particular occupations at each grade level. The three occupations chosen by the highest percentages of students were, respectively, technical, science and general cultural. Certain trends were noted with respect to the grade distribution of these choices. The percentage of students who chose general cultural occupations increased from

9.4 per cent at the grade nine level to 17.3 per cent at the grade eleven level. At the grade twelve level the percentage declined to 13.6 per cent. The percentage of students who chose technical occupations showed little variation over the four years. At the grade nine level 22.6 per cent of the students chose technical occupations while the corresponding percentage at the grade twelve level was 22.7 per cent. The percentage of students who did not make an occupational choice declined from 25.3 per cent at the grade nine level to 11.6 per cent at the grade twelve level.

TABLE VIII

OCCUPATIONS CHOSEN BY MALE HIGH SCHOOL STUDENTS BY GRADE: BY PERCENTAGE

Grade Level	Service	Organ.	Tech.	Outdoors	Science	Gen. Cult.	Arts	No Reply	Total Number
IX	7.6	7.9	22.6	1.8	15.3	9.4	9.7	25.3	339
X	10.5	7.1	24.2	2.5	18.3	14.3	8.7	14.3	322
XI	5.9	5.9	21.6	3.4	14.5	17.3	9.7	20.8	236
XII	8.1	8.1	22.7	4.0	20.7	13.6	11.1	11.6	198
Total	8.2	7.4	22.9	2.7	16.9	13.3	9.7	18.8	1095

University Plans by Grade

It was hypothesized that university plans are related to the grade level of the student. Table IX shows the percentages of students at each grade level who responded to the questionnaire item, "Are you planning to go on to college or university after high school?" A test

of independence was applied; the observed chi square was not statistically significant. Inspection of the data showed little variation in the university plans of the students over the four-year period. At the grade nine level 59.3 per cent of the students planned to attend university. This percentage increased slightly to 62.1 per cent at the grade twelve level. There was less variation in the percentage of students who did not plan to attend university. At the grade nine level 20.1 per cent of the students did not plan to attend; at the grade twelve level the percentage who did not plan to attend was 20.7 per cent. The percentage of students who were undecided declined from 20.7 per cent at the grade nine level to 17.2 per cent at the grade twelve level.

TABLE IX

UNIVERSITY PLANS OF MALE HIGH SCHOOL STUDENTS BY GRADE: BY PERCENTAGES

Grade Level	Planned to Attend	Did not plan to Attend	Undecided	No Reply	Total
IX	59.3	20.1	20.7		339
X	57.2	21.2	21.2	.3	322
XI	58.6	19.5	19.7	2.1	236
XII	62.1	20.7	17.2		198
Total	58.9	20.3	19.9	.8	1095

University Programs by Grade

Those students who planned to attend university were asked to state the program that they would like to study at university. Table X

shows the distribution of the responses made by these students. The four university programs chosen by the highest percentages of students were, respectively, engineering, science and education, pre-med. Only minor variations were evident in the percentages of students choosing these programs over the four years. The percentage of students choosing engineering was 19 per cent at the grade nine level and 19.9 per cent at the grade twelve level. At the grade nine level 14.1 per cent chose science. At the grade twelve level 14.9 per cent made this choice. The percentage of students choosing education increased from four per cent to 7.1 per cent over the four years. The percentage of students choosing pred-med declined from 9.3 per cent to 7.8 per cent over the four years. The most apparent trend evident in the Table is the decline in the percentages of students who were undecided in making a choice. At the grade nine level 36.7 per cent of the students indicated their indecision. At the grade twelve level the corresponding percentage was 19.9 per cent.

TABLE X

UNIVERSITY PROGRAMS CHOSEN BY MALE HIGH SCHOOL STUDENTS BY GRADE: BY PERCENTAGES

Grade Level	Undecided	Lib. Arts	Sc.	Ed.	Business	Eng.	Agric.	Pre-Med	Pre-Law	No Reply	Total
IX	36.7	3.5	14.1	4.0	5.8	19.0	.9	9.3	6.2	.4	339
X	31.8	4.9	15.2	10.3	4.5	19.7	1.8	5.8	5.4	.5	322
XI	22.7	9.2	12.3	11.7	4.3	15.9	3.1	10.4	8.0	2.5	236
XII	19.9	11.3	14.9	7.1	5.0	19.9	9.2	7.8	5.0	--	198
Total	27.8	7.2	14.1	8.3	4.9	18.6	3.8	8.3	6.1	.9	1095

III. SCHOOL DISTRIBUTION OF VOCATIONAL CHOICE

This section reports the findings with respect to the vocational choices made by the students when controlled by the school that they attended. The data relating to "Student University Plans" were tabulated as observed and expected frequencies since a test of independence was applied and the observed chi square was found to be statistically significant. The schools have been designated alphabetically as described in Chapter III.

Occupational Choice by School

It was hypothesized that occupational choice is related to the school attended by the student. Table XI shows the percentages of students at each school who chose particular occupations. A test of independence was applied; the observed chi square was not statistically significant.

However, with respect to school "G" (a technical school) two findings were significant. At school "G" the proportion of students who selected technical occupations was seventy-three out of 183 students or 39.9 per cent. Excluding school "G", the proportion of students who chose technical occupations was 178 out of a total of 912 or 19.5 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 35.96 is significant at the .001 level. The proportion of students from school "G" who chose technical occupations was higher than the proportions of students from the other schools who chose technical occupations.

At school "G" five out of 183 or 2.7 per cent of the students

TABLE XI

OCCUPATIONS CHOSEN BY MALE HIGH SCHOOL STUDENTS BY SCHOOL: BY PERCENTAGES

	OCCUPATIONS								
School	Service	Organ.	Tech.	Outdoors	Science	Gen. Cult.	Arts	No Reply	Total
A	5.0	8.2	18.9	1.9	20.1	17.6	7.6	20.8	159
B	11.9	6.6	25.8	2.0	20.5	9.9	11.9	11.3	151
C	10.4	11.3	17.0	6.6	15.1	15.1	14.1	10.4	106
D	8.3	6.1	21.2	3.0	19.7	12.9	12.1	17.4	132
E	3.6	11.5	18.0	2.2	18.0	14.4	7.9	24.5	139
F	5.8	7.5	18.3	.8	25.0	23.3	8.3	10.8	120
G	11.5	3.3	39.9*	1.1	2.7*	6.0	8.7	26.2	183
H	9.5	5.7	16.2	6.7	20.9	10.5	7.6	22.9	105
Total	8.2	7.4	22.9	2.7	16.9	13.3	9.7	18.8	1095

*Signifies a difference statistically significant at or beyond the .05 level.

chose a science occupation. At the other seven schools 182 out of 912 or 20 per cent of the students chose science occupations. A test of the significance of the difference between proportions was applied; the obtained chi square of 32.97 is significant at the .001 level. A higher proportion of the students at schools other than school "G" chose science occupations.

University Plans by School

It was hypothesized that university plans are related to the school attended by the student. Table XII shows the observed and expected frequencies of the two variables: School and university plans.

TABLE XII

UNIVERSITY PLANS OF MALE HIGH SCHOOL STUDENTS BY SCHOOL: BY OBSERVED AND EXPECTED FREQUENCIES

School	Planned to Attend	Did not Plan to Attend	Undecided	Total
A	111(92.8)*	13(31.7)*	35(33.3)	159
B	80(89.1)	43(30.1)*	28(31.6)	151
C	69(62.5)	17(21.1)	20(22.2)	106
D	75(77.9)	24(26.3)	34(27.6)	133
E	108(82)*	5(27.7)*	26(29.1)	139
F	90(70.8)*	21(23.9)	9(25.1)	120
G	39(108)*	82(36.4)*	61(38.3)*	182
H	74(61.9)	13(20.9)	18(22)	105
Total Observed	646	218	231	1095

*Signifies a difference statistically significant at or beyond the .05 level.

A test of independence was applied; the obtained chi square of 191.80 is significant at the .001 level. The observed chi square indicated that the relationship between the two variables was statistically significant. Further analyses of the data presented in the Table provided more specific information.

At school "A" the proportion of students who planned to attend university was 111 out of a total of 159 students or 69.8 per cent. At the other seven schools 535 out of a total of 936 or 57.2 per cent of the students planned to attend university. A test of the significance of

the difference between proportions was applied; the obtained chi square of 9.01 is significant at the .01 level. The proportion of students at school "A" who planned to attend university was higher than the proportion of students from the other schools who planned to attend university.

At school "E" 108 out of 139 or 77.7 per cent of the students planned to attend university compared to 538 out of 956 or 56.4 per cent of non-school "E" students who planned to attend university. A test of the significance of the difference between proportions was applied; the obtained chi square of 23.04 is significant at the .001 level. A higher proportion of school "E" than non-school "E" students planned to attend university.

The proportion of students at school "F" who planned to attend university was ninety out of a total of 120 students or 75 per cent compared to 556 out of 975 or 57 per cent of the non-school "F" students who planned to attend. A test of the significance of the difference between proportions was applied; the obtained chi square of 14.28 is significant at the .001 level. A higher proportion of students attending school "F" than at schools other than school "F" planned to attend university.

At school "G" the proportion of students who planned to attend university was thirty-nine out of a total of 183 students or 21.3 per cent. At the other seven schools 607 out of 912 or 66 per cent of the students planned to attend university. A test of the significance of the difference between proportions was applied; the obtained chi square of 130.06 is significant at the .001 level. A higher proportion of the students who attended schools other than school "G" planned to attend university.

The proportion of students at school "A" who did not plan to

attend university was thirteen out of a total of 159 students or 8.1 per cent. At the other seven schools 205 out of 936 or 21.9 per cent of the students did not plan to attend university. A test of the significance of the difference between proportions was applied; the obtained chi square of 16.09 is significant at the .001 level. A higher proportion of the students attending schools other than school "A" did not plan to attend university.

The proportion of students at school "B" who did not plan to attend university was forty-three out of a total of 151 students or 28.5 per cent. At the other seven schools 175 out of 944 or 18.5 per cent of the students did not plan to attend university. A test of the significance of the difference between proportions was applied; the obtained chi square of 8.08 is significant at the .01 level. A higher proportion of school "B" students did not plan to attend university than was the case in the other schools.

At school "E" five out of 139 or 3.6 per cent of the students did not plan to attend university compared to 213 out of 956 or 22.3 per cent of the non-school "E" students not planning to attend university. A test of the significance of the difference between proportions was applied; the obtained chi square of 26.57 is significant at the .001 level. A higher proportion of non-school "E" than school "E" students did not plan to attend university.

The proportion of school "G" students who did not plan to attend university was eighty-two out of a total of 183 students or 44.8 per cent. At the other schools 136 out of 912 or 14.9 per cent of the students did not plan to attend university. A test of the significance

of the difference between proportions was applied; the obtained chi square of 85.19 is significant at the .001 level. A higher proportion of school "G" than non-school "G" students did not plan to attend university.

At school "F" nine out of 120 or 7.5 per cent of the students were undecided in their plans compared to 220 out of 975 or 22.6 per cent of non-school "F" students who were undecided. A test of the significance of the difference between proportions was applied; the obtained chi square of 14.66 is significant at the .001 level. A higher proportion of non-school "F" students were undecided in their university plans.

At school "G" the proportion of students who were undecided was sixty-one out of a total of 183 students or 33.3 per cent. At the other seven schools 168 out of 912 or 18.4 per cent of the students were undecided. A test of the significance of the difference between proportions was applied; the obtained chi square of 20.49 is significant at the .001 level. A higher proportion of school "G" students were undecided in their university plans than was the case at the other seven schools.

University Program Choice by School

It was hypothesized that there is a relationship between the student's choice of a program and the school attended by the student. Table XIII shows the percentages of students choosing particular programs, for each of the eight schools. A test of independence was applied; the observed chi square was not statistically significant. One finding with respect to school "H" was significant.

At school "H" thirty-two out of seventy-four or 43.8 per cent of

TABLE XIII

UNIVERSITY PROGRAM CHOSEN BY MALE HIGH SCHOOL STUDENTS BY SCHOOL: BY PERCENTAGES

	UNIVERSITY PROGRAMS									
School	Undecided	Lib. Arts	Science	Educ.	Business	Eng.	Agric.	Pre-Med	Pre-Law	Total
A	28.5	6.2	13.1	6.9	6.2	19.2	.8	11.5	6.9	111
B	32.0	7.4	20.1	10.6	4.2	13.8	5.3	4.2	2.1	80
C	20.3	14.0	14.0	11.4	5.1	16.5	5.1	7.6	6.4	69
D	26.0	3.1	17.7	14.6	6.2	13.5	5.2	9.4	3.1	75
E	27.2	7.0	13.2	6.1	4.4	20.2	2.6	9.7	9.7	108
F	28.9	7.8	11.1	6.7	5.6	16.7	1.1	12.2	10.0	90
G	28.6	2.9	10.0	5.7	1.4	32.9	7.2	--	5.7	39
H	43.8*	5.0	12.5	2.5	5.0	20.0	--	7.5	3.8	74
Total	29.4	6.1	14.0	8.3	5.5	19.4	3.4	7.8	5.8	646

*Signifies a difference statistically significant at or beyond the .05 level.

the students were undecided in their choice of an university program. At schools other than school "H" the proportion of students who were undecided was 159 out of a total of 572 students or 27.8 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 7.54 is significant at the .01 level. A higher proportion of school "H" students were undecided in their choice of a program than was the case at the other schools.

IV. FATHER'S EDUCATION AND VOCATIONAL CHOICE

In this section the distributions of vocational choices made by the students when controlled by the educational backgrounds of their fathers are reported.

Educational Background of the Father and Occupational Choice

It was hypothesized that the educational background of the father is related to occupational choice. Table XIV shows the observed and expected frequencies of the two variables. A test of independence was applied; the obtained chi square of 3.3 is significant at the .01 level. The observed chi square indicated that the relationship between educational background of the father and occupational choice was statistically significant. Further analysis of the data provided more specific information.

The proportion of students planning to enter a technical occupation who came from homes where the father had a partial or complete grade school education was 121 out of a total of 319 students or 37.9 per cent. The proportion of students planning to enter technical occupations who came from homes where the father had more than a grade school education was 103 out of a total of 479 students or 21.5 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 25.65 is significant at the .001 level. The proportion of students planning to enter a technical occupation who came from homes where the father had a partial or complete grade school education was higher than the proportion of students planning to enter a technical occupation who came from homes where the

TABLE XIV

EDUCATIONAL BACKGROUND OF THE FATHER AND OCCUPATIONAL CHOICE: BY OBSERVED AND EXPECTED FREQUENCIES

	OCCUPATIONS							
Father's Education	Service	Organ.	Technical	Outdoors	Science	Gen. Cult.	Arts	Total
Some grade school	19 (15.6)	13 (13.9)	60 (44.4)	5 (5.1)	19 * (33.7)	17 * (27.3)	25 (18)	158
Finished Gr.Sch.	20 (15.9)	11 (14.1)	61 * (45.2)	1 (5.2)	31 (34.3)	20 (27.9)	17 (18.4)	161
Some high school	20 (17.9)	19 (15.9)	34 (50.9)	9 (5.9)	41 (38.6)	36 (31.3)	22 (20.6)	181
Finished H.Sch.	9 (13.4)	10 (11.8)	39 (37.9)	6 (5.4)	33 (28.8)	28 (23.4)	10 (15.4)	135
Some College	1 (3.3)	6 (2.9)	6 (9.3)	0 (1.1)	6 (7)	10 (5.7)	4 (3.8)	33
Finished College	3 (6.2)	5 (5.5)	13 (17.7)	2 (2.1)	20 (13.4)	13 (10.9)	7 (7.2)	63
Grad. School	5 (5.6)	5 (5.1)	5 * (13.2)	2 (1.5)	16 (10)	11 (8.1)	3 (5.4)	47
Tech. School	2 (2)	1 (1.8)	6 (5.6)	1 (.7)	4 (5.3)	3 (3.5)	3 (2.3)	20
Total Observed	79	70	224	26	170	138	91	798

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to Father's education and occupational choice were included in the table.

father had more than a grade school education.

Of the students planning to enter a science occupation, nineteen out of a total of 159 students or 12 per cent came from homes where the

father had a partial or complete grade school education. On the other hand, 151 out of 640 or 23.6 per cent of the students planning to enter a science occupation came from homes where the father had more than a grade school education. A test of the significance of the difference between proportions was applied; the obtained chi square of 10.20 is significant at the .01 level. The proportion of students planning to enter a science occupation who came from homes where the father had more than a grade school education was higher than the proportion of students who planned to enter a science occupation who came from homes where the father had a partial or complete grade school education.

The proportion of students who chose general cultural occupations who came from homes where the father had a partial or complete grade school education was seventeen out of a total of 158 students or 10.8 per cent. The proportion of students choosing general cultural occupations who came from homes where the father had more than a grade school education was 121 out of a total of 640 students or 18.9 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 5.95 is significant at the .02 level. The proportion of students choosing a general cultural occupation who came from homes where the father had more than a grade school education was higher than the proportion of students choosing a general cultural occupation who came from homes where the father had a partial or complete grade school education.

The proportion of students choosing a technical occupation who came from homes where the father had attended graduate school was five out of a total of forty-seven students or 10.3 per cent. The proportion

of students choosing a technical occupation who came from homes where the father had not attended graduate school was 219 out of a total of 751 students or 29.2 per cent. A test of the significance of the difference between proportions was applied, the obtained chi square of 5.17 is significant at the .05 level. The proportion of students choosing a technical occupation who came from homes where the father had not attended graduate school was higher than the proportion of students choosing a technical occupation who came from homes where the father had attended graduate school.

Educational Background of the Father and University Plans

It was hypothesized that the educational background of the father is related to university plans. Table XV shows the observed and expected frequencies of the two variables. A test of independence was applied; the obtained chi square of 124.9 is significant at the .001 level. The observed chi square indicated that the relationship between father's education and university plans was statistically significant. Further analysis of the data provided more specific information.

The proportion of students planning to attend university who came from homes where the father had a partial or complete grade school education was 171 out of a total of 366 students or 46.7 per cent. The proportion of students planning to attend university who came from homes where the father had more than a grade school education was 410 out of a total of 573 students or 71.6 per cent. A test of the significance of the difference between proportion was applied; the obtained chi square of 58.40 is significant at the .001 level. A higher proportion of students planning to attend university came from homes where the

TABLE XV

EDUCATIONAL BACKGROUND OF THE FATHER AND UNIVERSITY PLANS: BY OBSERVED AND EXPECTED FREQUENCIES

Father's Education	UNIVERSITY PLANS Planned to Attend	Did not Plan to Attend	Undecided	Total
Some Grade School	85(116.3)*	64(38.6)*	39(33)	188
Finished Gr.Sch.	86(110.1)*	61(16.3)*	31(31.3)	178
Some High Sch.	144(135.5)	30(45)	45(38.5)	219
Finished H.Sch.	107(97.9)	20(32.5)	31(27.8)	158
Some College	33(24.8)*	3(8.2)*	4(7)*	40
Finished College	68(47)*	5(15.6)*	3(13.4)*	76
Graduate School	41(34)*	5(11.3)*	9(9.7)*	55
Technical School	17(15.5)	5(5.1)	3(4.4)	25
Total Observed	581	193	165	939

*Signifies a difference statistically significant at, or beyond, the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to father's education and university plans were included in the table.

father had more than a grade school education.

The proportion of students planning to attend university who came from homes where the father had attended university was 142 out of a total of 171 students or 83 per cent. The proportion of students planning to attend university who came from homes where the father had not attended university was 439 out of a total of 768 students or 57.2 per cent. A test of the significance of the difference between

proportions was applied; the obtained chi square of 39.74 is significant at the .001 level. A higher proportion of students planning to attend university came from homes where the father had attended university.

The proportion of students not planning to attend university who came from homes where the father had a partial or complete grade school education was 125 out of a total of 188 students or 66.5 per cent. The proportion of students not planning to attend university who came from homes where the father had more than a grade school education was sixty-eight out of a total of 751 students or 9.1 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 305.67 is significant at the .001 level. The proportion of students not planning to attend university who came from homes where the father had a partial or complete grade school education was higher than the proportion of students not planning to attend university who came from homes where the father had more than a grade school education.

The proportion of students not planning to attend university who came from homes where the father had attended university was thirteen out of a total of 171 students or 7.6 per cent. The proportion of students not planning to attend university who came from homes where the father had not attended university was 180 out of a total of 768 students or 23.4 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 21.60 is significant at the .001 level. A higher proportion of students not planning to attend university came from homes where the father had not attended university.

The proportion of students who were undecided in their university plans who came from homes where the father had attended university was sixteen out of a total of 171 students or 9.4 per cent. The proportion of students who were undecided who came from homes where the father had not attended university was 149 out of a total of 768 students or 19.4 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 9.78 is significant at the .01 level. A higher proportion of the students who were undecided in their university plans came from homes where the father had not attended university.

Educational Background of the Father and University Program

It was hypothesized that the educational background of the father is related to the choice of an university program. Table XVI shows the observed and expected frequencies of the two variables. Numerous small expected frequencies necessitated the combining of "Father's Education" into three categories, and excluding "technical school" education. A test of independence was applied; the obtained chi square was not statistically significant.

V. MOTHER'S EDUCATION AND VOCATIONAL CHOICE

In this section the distributions of vocational choices made by the students when controlled by their mother's education are reported.

Educational Background of the Mother and Occupational Choice

It was hypothesized that the educational background of the mother is related to occupational choice. Table XVII shows the observed

TABLE XVI

EDUCATIONAL BACKGROUND OF THE FATHER AND UNIVERSITY PROGRAMS: BY OBSERVED AND EXPECTED FREQUENCIES

	UNIVERSITY PROGRAMS									
Father's Education	Undecided	Lib. Arts	Science	Educ.	Business	Eng.	Agric.	Pre-Med	Pre-Law	Total
Grade School	69 (64.5)	12 (14.2)	27 (30.7)	19 (18.6)	11 (10.8)	44 (41.6)	11 (7.1)	16 (18.9)	12 (14.2)	221
High School	84 (84.1)	15 (18.5)	44 (40)	28 (24.2)	13 (14.1)	54 (54.1)	10 (9.2)	19 (24.7)	21 (18.5)	288
College	38 (42)	15 (9.3)	20 (20)	8 (12.1)	8 (7.1)	25 (27)	0 (3.6)	21 (12.3)	9 (9.3)	144
Total Observed	191	42	91	55	32	123	21	56	42	653

NOTE: Only those students who replied to the questionnaire items relating to father's education and university programs were included in the table.

and expected frequencies of the two variables. Small expected frequencies necessitated the combining of "university education" under one heading, and the combining of "science" and "outdoors" occupational groups. "Technical school" education was excluded from the Table. A test of significance was applied to the data; the obtained chi square of 39.21 is significant at the .01 level. The observed chi square indicated that the relationship between the educational background of the mother and occupational choice was statistically significant. Certain specific findings in the Table were significant.

The proportion of students planning to enter a technical occupation who came from homes where the mother had a partial or complete grade school education was ninety-one out of a total of 241 students or

TABLE XVII

EDUCATIONAL BACKGROUND OF THE MOTHER AND OCCUPATIONAL CHOICE: BY OBSERVED AND EXPECTED FREQUENCIES

	OCCUPATIONS						
Mother's Education	Service	Organ.	Technical	Outdoors-Science	General Cultural	Arts	Total
Some grade school	6(7.7)	5(7.5)	34(62.2)*	10(19.4)	9(13)	15(9.1)	79
Finished Gr.Sch.	18(15.9)	13(15.4)	57(45.5)*	37(39.8)	21(26.7)	16(18.6)	162
Some high school	25(20.9)	23(20.3)	58(59.8)	49(52.4)	36(35.2)	22(24.5)	213
Finished H.Sch.	16(19.5)	24(19)	45(55.9)	56(49)	33(32.8)	25(22.9)	199
College	11(12)	9(11.7)	24(34.6)	39(30.2)	29(20.3)*	11(14.2)	123

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to mother's education and occupational choice were included in the table.

37.8 per cent. The proportion of students planning to enter a technical occupation who came from homes where the mother had more than a grade school education was 127 out of a total of 535 students or 23.4 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 16.25 is significant at the .001 level. A higher proportion of students planning to enter a technical occupation came from homes where the mother had a partial, or complete grade school education.

The proportion of students planning to enter a general cultural occupation who came from homes where the mother had attended university was twenty-nine out of a total of 123 students or 23.6 per cent. The

proportion of students planning to enter a general cultural occupation who came from homes where the mother had not attended university was ninety-four out of a total of 653 students or 15.2 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 5.31 is significant at the .05 level. A higher proportion of the students planning to enter a general cultural occupation came from homes where the mother had attended university.

Educational Background of the Mother and University Plans

It was hypothesized that the educational background of the mother is related to university plans. Table XVIII shows the observed and expected frequencies of the two variables. Numerous small expected frequencies necessitated the combining of "university education" under one heading, and the exclusion of "technical school" education. A test of independence was applied; the obtained chi square of 61.30 is significant at the .001 level. The observed chi square indicated that the relationship between the educational background of the mother and university plans was statistically significant. Further analysis of the data provided more specific information.

The proportion of students planning to attend university who came from homes where the mother had a partial, or complete grade school education was 137 out of a total of 283 students or 48.4 per cent. The proportion of students planning to attend university who came from homes where the mother had more than a grade school education was 421 out of a total of 622 students or 67.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 30.64 is significant at the .001 level. A higher proportion of

TABLE XVIII

EDUCATIONAL BACKGROUND OF THE MOTHER AND UNIVERSITY PLANS: BY OBSERVED AND EXPECTED FREQUENCIES

	UNIVERSITY PLANS			
Mother's Education	Planned to Attend	Did not Plan to Attend	Undecided	Total
Some Grade School	50(61.7)*	32(21.3)*	18(17)	100
Finished Gr.Sch.	87(112.9)*	55(39)*	41(31.1)	183
Some High School	136(148.7)	60(51.3)	45(41)	241
Finished High School	167(142.6)	31(149.2)	33(39.3)	231
College	118(92.6)*	15(32)*	17(25.5)	150
Total Observed	558	193	154	905

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to mother's education and university plans were included in the Table.

students planning to attend university came from homes where the mother had more than a grade school education.

The proportion of students not planning to attend university who came from homes where the mother had a partial, or complete grade school education was eighty-seven out of a total of 283 students or 30.7 per cent. The proportion of students not planning to attend university who came from homes where the mother had more than a grade school education was 106 out of a total of 622 students or 17 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 21.83 is significant at the .001 level. A higher

proportion of students not planning to attend university came from homes where the mother had a partial, or complete grade school education.

The proportion of students planning to attend university who came from homes where the mother had attended university was 118 out of a total of 150 students or 78.7 per cent. The proportion of students planning to attend university who came from homes where the mother had not attended university was 440 out of a total of 775 students or 58.3 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 22.13 is significant at the .001 level. A higher proportion of students planning to attend university came from homes where the mother had attended university.

The proportion of students not planning to attend university who came from homes where the mother had attended university was fifteen out of a total of 150 students or 10 per cent. The proportion of students not planning to attend university who came from homes where the mother had not attended university was 178 out of a total of 755 students or 23.6 per cent. A test of the significance of the difference between proportions was applied; the observed chi square of 13.79 is significant at the .001 level. A higher proportion of those students not planning to attend university came from homes where the mother had not attended university.

Educational Background of the Mother and University Program

It was hypothesized that the educational background of the mother was related to the choice of an university program. Table XIX shows the observed and expected frequencies of the two variables. Numerous small

TABLE XIX

EDUCATIONAL BACKGROUND OF THE MOTHER AND UNIVERSITY PROGRAM: BY OBSERVED AND EXPECTED FREQUENCIES

	UNIVERSITY PROGRAMS									
Mother's Education	Undecided	Lib. Arts	Science	Educ.	Business	Eng.	Agric.	Pre-Med	Pre-Law	Total
Some Grade School	17 (17.6)	5 (4.1)	6 (8.3)	6 (5.1)	2 (3.4)	13 (11.6)	5 (2.2)	2 (5.2)	5 (3.7)	61
Finished Gr.Sch.	37 (34.3)	6 (8.1)	22 (16.2)	9 (10)	7 (6.5)	24 (22.6)	3 (4.2)	9 (10.1)	2 (7.1)	119
Some High School	53 (48.4)	8 (11.4)	25 (22.8)	14 (14)	13 (9.3)	28 (31.9)	6 (6)	11 (14.2)	10 (10.1)	168
Finished High Sch.	45 (52.1)	11 (12.3)	22 (24.6)	13 (15.1)	12 (10)	35 (34.4)	6 (6.4)	19 (15.3)	18 (10.9)	181
College	35 (34.6)	14 (8.1)	13 (16.3)	12 (10)	2 (6.7)	23 (22.8)	3 (4.3)	14 (10.2)	4 (7.2)	120
Total Observed	187	44	88	54	36	123	23	55	39	

NOTE: Only those students who replied to the questionnaire items relating to mother's education and university programs were included in the table.

expected frequencies necessitated the combining of "university education" under one heading, and the excluding of "technical school" education from the table. A test of independence was applied; the obtained chi square was not statistically significant.

VI. FATHER'S OCCUPATION AND VOCATIONAL CHOICE

In this section the distributions of vocational choices made by the students when controlled by their father's occupation are reported.

Father's Occupation and Occupational Choice

It was hypothesized that the occupational background of the father is related to occupational choice. Table XX shows the observed and expected frequencies of the two variables. Numerous small expected frequencies necessitated the combining of the father's "science and technical," and "general cultural and artistic" occupations. A test of independence was applied; the obtained chi square of 3.55 is significant

TABLE XX

OCCUPATION OF THE FATHER AND OCCUPATIONAL CHOICE:
BY OBSERVED AND EXPECTED FREQUENCIES

	OCCUPATIONS								
Father's Occupation	Service	Organ.	Tech.	Science	Out-doors	Gen. Cult.	Arts	No Reply	Total
Service	17* (9.9)	8 (8.6)	27 (27)	19 (20.1)	2 (3.3)	10 (16)	12 (9.4)	21 (19.4)	116
Organization	20 (32.6)	40* (28.5)	63 (89.2)	68 (68.2)	10 (10.9)	65 (52.9)	32 (54)	70 (64)	383
Science-Technical	18 (23.5)	10 (20.5)	82* (64.3)	56* (49.1)	7 (7.8)	33 (38.1)	28 (26.5)	42 (46.2)	276
Outdoors	2 (5.6)	6 (4.9)	18 (15.4)	12 (11.8)	4 (1.9)	9 (9.1)	2 (6)	13 (11)	66
General Cultural-Arts	7 (5.6)	3 (4.9)	15 (15.4)	13 (11.7)	1 (1.9)	13 (9.1)	5 (6.3)	9 (11)	66
Labor	13 (9.8)	9 (8.6)	33 (26.8)	14 (20.5)	5 (1)	11 (15.9)	14 (19.2)	16 (19.2)	115
Total Observed	87	76	238	182	29	141	98	171	1022

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to father's occupation and occupational choice were included in the table.

at the .01 level. The observed chi square indicated that the relationship between the occupation of the father and occupational choice was statistically significant. Certain specific findings were significant.

The proportion of students planning to enter a service occupation who came from homes where the father was employed in a service occupation was seventeen out of a total of 116 students, or 14.7 per cent. The proportion of students planning to enter a service occupation who came from homes where the father was employed in a non-service occupation was seventy out of a total of 906 students or 7.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 6.36 is significant at the .02 level. A higher proportion of students planning to enter a service occupation came from homes where the father was employed in a service occupation.

The proportion of students planning to enter an organization occupation who came from homes where the father was employed in an organization occupation was forty out of a total of 383 students or 10.4 per cent. The proportion of students planning to enter an organization occupation who came from homes where the father was employed in a non-organization occupation was thirty-six out of a total of 639 students or 5.6 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 8.10 is significant at the .01 level. A higher proportion of the students planning to enter an organization occupation came from homes where the father was employed in an organization occupation.

The proportion of students planning to enter a science-technical occupation who came from homes where the father was employed in a

science-technical occupation was 138 out of a total of 276 students or 50 per cent. The proportion of students planning to enter a science-technical occupation who came from homes where the father was employed in a non-science-technical occupation was 282 out of a total of 746 students or 37.8 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 12.42 is significant at the .001 level. A higher proportion of students planning to enter a science-technical occupation came from homes where the father was employed in a science-technical occupation.

Father's Occupation and University Plans

It was hypothesized that the occupational background of the father is related to university plans. Table XXI shows the observed and expected frequencies of the two variables. A test of independence was applied; the obtained chi square of 60.10 is significant at the .001 level. The observed chi square indicated that the relationship between the occupation of the father and university plans was statistically significant. Certain other specific findings in the table were significant.

The proportion of students planning to attend university who came from homes where the father was employed in a science occupation was twenty-eight out of a total of thirty-one students or 90.3 per cent. The proportion of students planning to attend university who came from homes where the father was employed in a non-science occupation was 592 out of a total of 973 students or 60.8 per cent. A test of the significance of the difference between proportions was applied; the obtained

TABLE XXI

OCCUPATION OF THE FATHER AND UNIVERSITY PLANS: BY OBSERVED AND EXPECTED FREQUENCIES

Father's Occupation	UNIVERSITY PLANS Planned to Attend	Did not Plan to Attend	Undecided	Total
Service	64(71.1)	26(23.5)	25(20.5)	115
Organization	259(231.1)	55(76.3)*	60(66.6)	374
Technical	139(149.6)	66(49.4)*	37(43.1)	242
Outdoors	39(40.8)	11(13.5)	16(11.8)	66
Science	28(19.2)*	2(6.3)*	1(5.5)	31
General Cult.	36(29.7)	6(9.8)	6(8.5)	48
Arts	11(9.9)	3(3.3)	2(2.8)	16
Labor	44(69.2)*	36(22.8)*	32(19.9)*	112
Total Observed	620	205	179	1004

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to Father's occupation and university plans were included in the table.

chi square of 11.17 is significant at the .001 level. A higher proportion of students planning to attend university came from homes where the father was employed in a science occupation.

The proportion of students planning to attend university who came from homes where the father was employed as a laborer was forty-four out of a total of 112 students or 39.3 per cent. The proportion of students planning to attend university who came from homes where the father was employed in a non-labor occupation was 576 out of a total of

892 students or 64.6 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 27.03 is significant at the .001 level. A higher proportion of students planning to attend university came from homes where the father was employed in a non-labor occupation.

The proportion of students not planning to attend university who came from homes where the father was employed in a science occupation was two out of a total of thirty-one students or 6.5 per cent. The proportion of students not planning to attend university who came from homes where the father was employed in a non-science occupation was 203 out of a total of 973 students or 20.9 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 3.88 is significant at the .05 level. A higher proportion of students not planning to attend university came from homes where the father was employed in a non-science occupation.

The proportion of students not planning to attend university who came from homes where the father was employed in an organization occupation was fifty-five out of a total of 374 students or 14.7 per cent. The proportion of students not planning to attend university who came from homes where the father was employed in a non-organization occupation was 150 out of a total of 630 students or 23.8 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 11.80 is significant at the .001 level. A higher proportion of students not planning to attend university came from homes where the father was employed in a non-organization occupation.

The proportion of students not planning to attend university who came from homes where the father was employed in a technical occupation was sixty-six out of a total of 242 students or 27.3 per cent. The proportion of students not planning to attend university who came from homes where the father was employed in a non-technical occupation was 139 out of a total of 762 students or 18.2 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 7.39 is significant at the .01 level. A higher proportion of students not planning to attend university came from homes where the father was employed in a technical occupation.

The proportion of students not planning to attend university who came from homes where the father was employed as a laborer was thirty-six out of a total of 112 students or 32.1 per cent. The proportion of students not planning to attend university who came from homes where the father was employed in a non-labor occupation was 169 out of a total of 892 students or 18.9 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 10.70 is significant at the .01 level. A higher proportion of students not planning to attend university came from homes where the father was employed as a laborer.

The proportion of students who were undecided in their university plans who came from homes where the father was employed in a science occupation was one out of a total of thirty-one students or 3.2 per cent. The proportion of students who were undecided who came from homes where the father was employed in a non-science occupation was 178 out of a total of 973 students or 18.3 per cent. A test of the

significance of the difference between proportions was applied; the obtained chi square of 4.73 is significant at the .05 level. A higher proportion of the students who were undecided in their university plans came from homes where the father was employed in a non-science occupation.

The proportion of students who were undecided in their university plans who came from homes where the father was employed as a laborer was thirty-two out of a total of 112 students or 28.6 per cent. The proportion of students who were undecided who came from homes where the father was employed in a non-labor occupation was 140 out of a total of 892 students or 15.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 11.70 is significant at the .001 level. A higher proportion of students who were undecided in their university plans came from homes where the father was employed in a labor occupation.

Father's Occupation and University Program

It was hypothesized that the occupational background of the father is related to the choice of an university program. Table XXII shows the observed and expected frequencies of the two variables. Numerous small expected frequencies necessitated the combining of "general cultural and artistic occupations" under one heading, and the exclusion of "agricultural university program." A test of independence was applied; the obtained chi square was not statistically significant.

TABLE XXII

OCCUPATION OF THE FATHER AND UNIVERSITY PROGRAMS: BY OBSERVED AND EXPECTED FREQUENCIES

	UNIVERSITY PROGRAMS								
Father's Occupation	Undecided	Lib. Arts	Science	Education	Business	Eng.	Pre-Med	Pre-Law	Total
Service	19 (22.2)	3 (5)	15 (10.8)	6 (6.1)	1 (3.8)	19 (14.1)	4 (6.4)	6 (5.2)	73
Organ.	101 (85.7)	21 (19.4)	32 (41.7)	23 (23.4)	21 (14.5)	40 (54.4)	26 (24.6)	18 (18.1)	282
Technical	38 (47.4)	12 (10.7)	27 (23.1)	15 (13)	6 (8)	39 (30.1)	11 (13.6)	8 (10)	156
Outdoors	11 (14)	1 (3.2)	8 (6.8)	3 (3.8)	2 (2.4)	12 (8.9)	3 (4)	6 (5)	46
Science	4 (7.6)	1 (1.7)	4 (3.7)	2 (2.1)	1 (1.3)	4 (5.3)	8 (2.2)	1 (1.6)	25
General Cultural-Arts	15 (15.2)	7 (5.4)	8 (7.4)	3 (4.9)	0 (2.6)	10 (9.7)	4 (5.4)	3 (5.1)	50
Labor	24 (20.1)	3 (5.1)	9 (9.8)	6 (5.5)	5 (3.4)	11 (12.7)	5 (5.7)	3 (4.3)	66
Total Observed	212	48	103	58	36	135	61	45	698

VII. SUMMARY OF FINDINGS

1. Certain trends were evident with respect to the grade level of the student and vocational choice:

a) The highest percentages of students chose technical, science, and general cultural occupations.

b) The highest percentages of students chose engineering, science and education, pre-med university programs.

c) The highest percentages of students who did not make an occupational choice, or who were undecided in their university plans and choice of an university program were evident at the grade nine level. Over the four-year high school period these percentages declined.

d) Only minor variations were evident in the university plans of the students over the four-year high school period.

2. Certain specific relationships between the school attended by the pupil and occupational choice were significant.

   a) A higher proportion of students attending school "G" chose technical occupations.

   b) A lower proportion of students attending school "G" chose science occupations.

3. The relationship between the school attended by the student and the student's university plans was statistically significant. Certain specific relationships were observed:

   a) Higher proportions of students planning to attend university attended schools "A", "E" and "F".

   b) Lower proportions of students not planning to attend university attended schools "A", "E", and "F".

   c) A lower proportion of students who were undecided in their university plans attended school "F".

   d) A lower proportion of students from school "G" planned to attend university.

   e) Higher proportions of students not planning to attend university attended schools "B" and "G".

f) A higher proportion of students who were undecided in their university plans attended school "G".

4. One specific relationship between the school attended by the student and the student's choice of an university program was significant.

   a) A higher proportion of students who were undecided in their choice of a program attended school "H".

5. The relationship between the educational background of the father and occupational choice was statistically significant. Certain other specific findings were significant:

   a) A higher proportion of students planning to enter a technical occupation came from homes where the father had a partial, or complete grade school education.

   b) A lower proportion of students planning to enter a technical occupation came from homes where the father had attended graduate school.

   c) A lower proportion of students planning to enter science, or general cultural occupations came from homes where the father had a partial, or complete grade school education.

6. The relationship between the educational background of the father and the students university plans was statistically significant. Certain other findings were significant:

   a) A lower proportion of students planning to attend university came from homes where the father had a partial, or complete grade school education.

   b) A higher proportion of students not planning to attend

university came from homes where the father had a partial or complete grade school education.

c) A higher proportion of students planning to attend university came from homes where the father had attended university.

d) A lower proportion of students not planning to attend university came from homes where the father had attended university.

e) A lower proportion of students who were undecided in their university plans came from homes where the father had attended university.

8. The relationship between the educational background of the mother and occupational choice was statistically significant. Certain other specific findings were significant:

a) A higher proportion of students planning to enter technical occupations came from homes where the mother had a partial, or complete grade school education.

b) A higher proportion of students planning to enter a general cultural occupation came from homes where the mother had attended university.

9. The relationship between the educational background of the mother and university plans was statistically significant. Certain other specific findings were significant:

a) A lower proportion of students planning to attend university came from homes where the mother had a partial, or complete grade school education.

b) A higher proportion of students not planning to attend university came from homes where the mother had a partial, or complete

grade school education.

c) A higher proportion of students planning to attend university came from homes where the mother had attended university.

d) A lower proportion of students not planning to attend university came from homes where the mother had attended university.

10. The relationship between the father's occupation and occupational choice was statistically significant. Certain other specific findings were significant:

    a) Higher proportions of students planning to enter service, organization, or science-technical occupations came from homes where the fathers were employed in these occupations.

11. The relationship between the father's occupation and university plans was statistically significant.

    a) A higher proportion of students planning to attend university came from homes where the father was employed in a science occupation.

    b) Lower proportions of students not planning to attend university came from homes where the father was employed in science, or organization occupations.

    c) A lower proportion of students who were undecided in their university plans came from homes where the father was employed in a science occupation.

    d) A lower proportion of students planning to attend university came from homes where the father was employed as a laborer.

    e) Higher proportions of students not planning to attend university came from homes where the father was employed as a laborer,

or in a technical occupation.

f) A higher proportion of students who were undecided in their university plans came from homes where the father was employed as a laborer.

CHAPTER VI

TREATMENT AND ANALYSIS OF DATA (PART III)

I. INTRODUCTION

The purpose of this chapter is to present the findings with respect to the relationship between vocational choice and the ideal orientation of the student. The data tabulated in this chapter were elicited by the questionnaire item, "If you could be any of these things you wanted, which would you most want to be?" In reply to this question, the students selected their ideal occupation from a list that included six ideal occupations: jet pilot, athlete, teacher, missionary, scientist, and artist. The treatment of the data follows a similar pattern to that used in Chapter V.

II. IDEAL ORIENTATION AND VOCATIONAL CHOICE

This section reports the distributions of vocational choices made by the students when controlled by one attitude variable, ideal orientation.

Ideal Orientation and Occupational Choice

It was hypothesized that the ideal orientation of the student is related to the occupational choice made by the student. Table XXIII shows the observed and expected frequencies for the two variables. Numerous small expected frequencies necessitated the combining of "missionary and teacher" under one heading. A test of independence was

applied; the obtained chi square of 350.30 is significant at the .001 level. The observed chi square indicated that the relationship between

TABLE XXIII

IDEAL ORIENTATION AND OCCUPATIONAL CHOICE: BY OBSERVED AND EXPECTED FREQUENCIES

Ideal Orientation	OCCUPATIONS							
	Service	Organization	Technical	Outdoors	Science	Gen. Cult.	Arts	Total
Jet Pilot	46* (20)	18 (17.9)	81* (57.2)	12 (6.8)	23* (42.6)	12* (32.9)	10* (24.6)	202
Athlete	19 (23.5)	29 (21)	63 (67.4)	4 (8)	42 (50.2)	39 (38.8)	42* (29)	238
Missionary - Teacher	5* (13.1)	11 (11.7)	30 (37.4)	2 (4.4)	17* (27.8)	62* (21.5)	5* (16.1)	132
Scientist	8* (20)	13 (17.9)	51 (57.2)	8 (6.8)	90* (42.6)	22* (32.9)	10 (24.6)	202
Artist	7 (8.4)	5 (7.5)	18 (24.1)	3 (2.8)	9* (17.9)	5* (13.9)	38* (10.4)	85
Total Observed	85	76	243	29	181	140	105	859

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to Ideal Orientation and Occupational choice were included in the table.

ideal orientation and occupational choice was statistically significant. Further analysis of the data provided more specific information.

The proportion of jet pilot oriented students planning to enter a service occupation was forty-six out of a total of 202 students or 22.8 per cent. The proportion of non-jet pilot oriented students planning to enter a service occupation was thirty-nine out of a total of 657 students

or 5.9 per cent. A test of the significance of the difference between proportions was applied; the observed chi square of 49.86 is significant at the .001 level. A higher proportion of jet pilot oriented students planned to enter a service occupation.

The proportion of jet pilot oriented students planning to enter a technical occupation was eighty-one out of a total of 202 students or 40.1 per cent. The proportion of non-jet pilot oriented students planning to enter a technical occupation was 162 out of a total of 657 students or 24.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 18.21 is significant at the .001 level. The proportion of jet pilot oriented students planning to enter a technical occupation was higher than the proportion of non-jet pilot oriented students planning to enter a technical occupation.

The proportion of jet pilot oriented students planning to enter a science occupation was twenty-three out of a total of 202 students or 11.4 per cent. The proportion of non-jet pilot oriented students planning to enter a science occupation was 158 out of a total of 657 students or 24.1 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 14.97 is significant at the .001 level. A higher proportion of non-jet pilot oriented students planned to enter a science occupation.

The proportion of jet pilot oriented students planning to enter a general cultural occupation was twelve out of a total of 202 students or 5.9 per cent. The proportion of non-jet pilot oriented students planning to enter a general cultural occupation was 128 out of a total of 657

students or 19.5 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 20.85 is significant at the .001 level. A higher proportion of non-jet pilot oriented students planned to enter a general cultural occupation.

The proportion of jet pilot oriented students planning to enter an arts occupation was ten out of a total of 202 students or five per cent. The proportion of non-jet pilot oriented students planning to enter an arts occupation was ninety-five out of a total of 657 students, or 14.5 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 13.14 is significant at the .001 level. A higher proportion of non-jet pilot oriented students planned to enter an arts occupation.

The proportion of athletically oriented students planning to enter an arts occupation was forty-two out of a total of 238 students or 17.7 per cent. The proportion of non-athletically oriented students planning to enter an arts occupation was sixty-two out of a total of 621 students or 10.1 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 9.11 is significant at the .01 level. A higher proportion of athletically oriented students planned to enter an arts occupation.

The proportion of missionary-teacher oriented students planning to enter a service occupation was five out of a total of 132 students or 3.8 per cent. The proportion of non-missionary-teacher oriented students planning to enter a service occupation was eighty out of a total of 727 students or 11 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 6.63 is

significant at the .02 level. A higher proportion of non-missionary-teacher oriented students planned to enter a service occupation.

The proportion of missionary-teacher oriented students planning to enter a science occupation was seventeen out of a total of 132 students or 12.9 per cent. The proportion of non-missionary-teacher oriented students planning to enter a science occupation was 164 out of a total of 727 students or 22.6 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 6.33 is significant at the .02 level. A higher proportion of non-missionary-teacher oriented students planned to enter a science occupation.

The proportion of missionary-teacher oriented students planning to enter a general cultural occupation was sixty-two out of a total of 132 students or 47 per cent. The proportion of non-missionary-teacher oriented students planning to enter a general cultural occupation was seventy-eight out of a total of 727 students or 10.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 109.36 is significant at the .001 level. A higher proportion of missionary-teacher oriented students planned to enter a general cultural occupation.

The proportion of missionary-teacher oriented students planning to enter an arts occupation was five out of a total of 132 students or 3.8 per cent. The proportion of non-missionary-teacher oriented students planning to enter an arts occupation was 100 out of a total of 727 students or 13.8 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 10.39 is

significant at the .01 level. A higher proportion of non-missionary-teacher oriented students planned to enter an arts occupation.

The proportion of science oriented students planning to enter a service occupation was eight out of a total of 202 students or four per cent. The proportion of non-science oriented students planning to enter a service occupation was seventy-seven out of a total of 657 students or 11.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 10.50 is significant at the .01 level. A higher proportion of the non-science oriented students planned to enter a service occupation.

The proportion of science oriented students planning to enter a science occupation was ninety out of a total of 202 students or 44.6 per cent. The proportion of non-science oriented students planning to enter a science occupation was ninety-one out of a total of 657 students or 13.9 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 89.13 is significant at the .001 level. A higher proportion of science oriented students planned to enter a science occupation.

The proportion of science oriented students planning to enter a general cultural occupation was twenty-two out of a total of 202 students or 10.9 per cent. The proportion of non-science oriented students planning to enter a general cultural occupation was 118 out of a total of 657 students or 18 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 5.67 is significant at the .02 level. A higher proportion of non-science oriented students planned to enter a general cultural

occupation.

The proportion of artistically oriented students planning to enter a science occupation was nine out of a total of 85 students or 10.6 per cent. The proportion of non-artistically oriented students planning to enter a science occupation was 172 out of a total of 774 students or 22.2 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 6.25 is significant at the .02 level. A higher proportion of the non-artistically oriented students planned to enter a science occupation.

The proportion of artistically oriented students planning to enter a general cultural occupation was five out of a total of eighty-five students or 5.9 per cent. The proportion of non-artistically oriented students planning to enter a general cultural occupation was 135 out of a total of 774 students or 17.4 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 7.56 is significant at the .01 level. A higher proportion of non-artistically oriented students planned to enter a general cultural occupation.

The proportion of artistically oriented students planning to enter an arts occupation was thirty-eight out of a total of eighty-five students or 44.7 per cent. The proportion of non-artistically oriented students planning to enter an arts occupation was sixty-seven out of a total of 774 students or 8.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 84.75 is significant at the .001 level. A higher proportion of artistically oriented students planned to enter an arts occupation.

Ideal Orientation and University Plans

It was hypothesized that the ideal orientation of the student is related to university plans. Table XXIV shows the observed and expected frequencies for the two variables. A test of independence was applied; the obtained chi square of 86.75 is significant at the .001 level. The observed chi square indicated that the relationship between ideal orientation and university plans was statistically significant. Further analysis of the data provided more specific information.

The proportion of jet pilot oriented students planning to attend university was 115 out of a total of 240 students or 47.9 per cent. The proportion of non-jet pilot oriented students planning to attend university was 511 out of a total of 770 students or 66.4 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 26.49 is significant at the .001 level. A higher proportion of non-jet pilot oriented students planned to attend university.

The proportion of jet pilot oriented students not planning to attend university was seventy-four out of a total of 240 students, or 30.8 per cent. The proportion of non-jet pilot oriented students not planning to attend university was 132 out of a total of 770 students or 17.1 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 21.19 is significant at the .001 level. A higher proportion of jet pilot oriented students did not plan to attend university.

The proportion of science oriented students planning to attend university was 199 out of a total of 240 students or 82.9 per cent. The

TABLE XXIV

IDEAL ORIENTATION AND UNIVERSITY PLANS: BY OBSERVED AND EXPECTED FREQUENCIES

Ideal Orientation	UNIVERSITY PLANS Planned to Attend	Did not Plan to Attend	Undecided	Total
Jet Pilot	115(148.8)*	74(49)*	51(42.2)	240
Athlete	170(176.7)	59(58.1)	56(50.2)	285
Missionary	23(24.8)	13(8.2)	4(7)	40
Teacher	74(66.3)	16(21.8)	17(18.8)	107
Scientist	199(148.8)*	17(49)*	24(42.2)*	240
Artist	45(60.8)*	27(20)	26(17.3)*	98
Total Observed	626	206	178	1010

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to Ideal Orientation and University plans were included in the table.

proportion of non-science oriented students planning to attend university was 427 out of a total of 770 students or 55.5 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 58.72 is significant at the .001 level. A higher proportion of science oriented students planned to attend university.

The proportion of science oriented students not planning to attend university was seventeen out of a total of 240 students or 7.1 per cent. The proportion of non-science oriented students not planning to attend university was 189 out of a total of 770 students or 24.6 per cent. A test of the significance of the difference between proportions

was applied; the obtained chi square of 34.51 is significant at the .001 level. A higher proportion of non-science oriented students did not plan to attend university.

The proportion of science oriented students who were undecided in their university plans was twenty-four out of a total of 240 students or 10.0 per cent. The proportion of non-science oriented students who were undecided in their university plans was 152 out of a total of 770 students or 19.7 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 10.02 is significant at the .01 level. A higher proportion of non-science oriented students were undecided in their university plans.

The proportion of artistically oriented students planning to attend university was forty-five out of a total of ninety-eight students or 45.9 per cent. The proportion of non-artistically oriented students planning to attend university was 581 out of a total of 912 students or 63.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 11.93 is significant at the .001 level. A higher proportion of non-artistically oriented students planned to attend university.

The proportion of artistically oriented students who were undecided in their university plans was twenty-six out of a total of ninety-eight students or 26.5 per cent. The proportion of non-artistically oriented students who were undecided in their university plans was 152 out of a total of 912 students or 16.7 per cent. A test of the significance of the difference between proportions was applied; the obtained chi square of 5.94 is significant at the .02 level. A higher

proportion of artistically oriented students were undecided in their university plans.

Ideal Orientation and University Program

It was hypothesized that ideal orientation is related to choice of an university program. Table XXV shows the observed and expected frequencies of the two variables. Numerous small expected frequencies necessitated the combining of "missionary-teacher" orientation under one heading and the exclusion from the Table of "artistic" orientation. A test of independence was applied; the obtained chi square of 205.1 is significant at the .001 level. The observed chi square indicated that the relationship between ideal orientation and choice of an university program was statistically significant. Further analysis of the data provided more specific information.

The proportion of jet pilot oriented students planning to enter an engineering program was forty-two out of a total of 148 students or 28.4 per cent. The proportion of non-jet pilot oriented students planning to enter an engineering program was eighty-eight out of a total of 526 students or 16.7 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 10.13 is significant at the .01 level. A higher proportion of jet pilot oriented students planned to enter an engineering program.

The proportion of athletically oriented students who were undecided in their choice of an university program was eighty-one out of a total of 214 students or 37.9 per cent. The proportion of non-athletically oriented students who were undecided in their choice of an university program was 111 out of a total of 460 students or 24.1 per

cent. A test of the significance of difference between proportions was applied; the obtained chi square of 13.51 is significant at the .001 level. A higher proportion of athletically oriented students who were undecided in their choice of an university program.

The proportion of athletically oriented students planning to enter a science program was eleven out of a total of 214 students or 5.1 per cent. The proportion of non-athletically oriented students planning to enter a science program was ninety-five out of a total of 460 students or 20.7 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 26.72 is significant at the .001 level. A higher proportion of non-athletically oriented students planned to enter a science program.

The proportion of missionary-teacher oriented students planning to enter an education program was thirty-five out of a total of 111 students or 31.5 per cent. The proportion of non-missionary-teacher oriented students planning to enter an education program was twenty-four out of a total of 563 students or 4.3 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 86.96 is significant at the .001 level. A higher proportion of missionary-teacher oriented students planned to enter an education program.

The proportion of missionary-teacher oriented students planning to enter a science program was seven out of a total of 111 students or 6.3 per cent. The proportion of non-missionary-teacher oriented students planning to enter a science program was ninety-nine out of a total of 563 students or 17.6 per cent. A test of the significance of

TABLE XXV

IDEAL ORIENTATION AND UNIVERSITY PROGRAMS: BY OBSERVED AND EXPECTED FREQUENCIES

	UNIVERSITY PROGRAMS									
Ideal Orientation	Undecided	Liberal Arts	Science	Education	Business	Engineering	Agric.	Pre-Med	Pre-Law	Total
Jet Pilot	40 (42.2)	8 (6.1)	19 (23.2)	5 (13)	12 (9)	42* (28.6)	6 (5.9)	8 (11.9)	8 (8.1)	148
Athlete	81 (61)	6 (8.9)	11* (33.6)	16 (18.7)	21 (15)	35 (41.3)	16 (10.6)	17 (17.1)	11 (11.7)	214
Missionary-Teacher	32 (31.6)	8 (4.6)	7* (17.4)	35* (9.7)	3 (6.8)	12 (19.4)	1 (4.4)	9 (8.9)	4 (6.1)	111
Scientist	39* (57.3)	6* (8.3)	69* (31.6)	3 (17.6)	5 (10.2)	41 (38.8)	4 (8)	20 (16.1)	14 (11)	201
Total Observed	192	28	106	59	41	130	27	54	37	674

*Signifies a difference statistically significant at or beyond the .05 level.

NOTE: Only those students who replied to the questionnaire items relating to Ideal Orientation and University programs were included in the table.

difference between proportions was applied; the obtained chi square of 10.28 is significant at the .01 level. A higher proportion of non-missionary-teacher oriented students planned to enter a science program.

The proportion of science oriented students who were undecided in their choice of an university program was thirty-nine out of a total of 201 students or 19.4 per cent. The proportion of non-science oriented students who were undecided in their choice of an university program was 153 out of a total of 473 students or 32.3 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 11.61 is significant at the .001 level. A higher proportion of non-science oriented students were undecided in their choice of an university program.

The proportion of science oriented students who planned to enter a science program was sixty-nine out of a total of 201 students or 34.3 per cent. The proportion of non-science oriented students planning to enter a science program was thirty-seven out of a total of 473 students or 7.8 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 75.07 was significant at the .001 level. A higher proportion of science-oriented students planned to enter a science program.

The proportion of science oriented students planning to enter an education program was three out of a total of 201 students. The proportion of non-science oriented students planning to enter an education program was fifty-six out of a total of 473 students or 11.8 per cent. A test of the significance of difference between proportions was applied; the obtained chi square of 18.89 is significant at the .001

level. A higher proportion of non-science oriented students planned to enter an education program.

III. SUMMARY OF FINDINGS

1. The relationship between the ideal orientation of the student and occupational choice was statistically significant. Certain specific relationships were observed:

   a) A higher proportion of jet pilot students planned to enter service or technical occupations.

   b) A lower proportion of jet pilot students planned to enter science, general cultural, or arts occupations.

   c) A higher proportion of athletically oriented students planned to enter an arts occupation.

   d) A higher proportion of missionary-teacher oriented students planned to enter a general cultural occupation.

   e) A lower proportion of missionary-teacher oriented students planned to enter service, science, or arts occupations.

   f) A higher proportion of science oriented students planned to enter science occupations.

   g) A lower porportion of science oriented students planned to enter service, or general cultural occupations.

   h) A higher proportion of artistically oriented students planned to enter arts occupations.

   i) A lower proportion of artistically oriented students planned to enter science, or general cultural occupations.

2. The relationship between the ideal orientation of the students and

university plans was statistically significant. Certain specific relationships were observed:

a) Lower proportions of jet pilot and artistically oriented students planned to attend university.

b) A higher proportion of science oriented students planned to attend university.

c) A higher proportion of jet pilot oriented students did not plan to attend university.

d) A lower proportion of science oriented students did not plan to attend university.

e) A lower proportion of science oriented students were undecided in their university plans.

f) A higher proportion of artistically oriented students were undecided in their university plans.

3. The relationship between the ideal orientation of the student and choice of an university program was statistically significant. Certain specific relationships were observed:

a) A higher proportion of jet pilot oriented students planned to enter an engineering program.

b) A higher proportion of athletically oriented students were undecided in their choice of an university program.

c) A lower proportion of athletically oriented students planned to enter a science program.

d) A higher proportion of missionary-teacher oriented students planned to enter an education program.

e) A lower proportion of missionary-teacher oriented students

planned to enter a science program.

f) A higher proportion of science oriented students planned to enter a science program.

g) A lower proportion of science oriented students planned to enter an education program.

h) A lower proportion of science oriented students were undecided in their choice of an university program.

CHAPTER VII

TREATMENT AND ANALYSIS OF DATA (PART IV)

I. INTRODUCTION

The purpose of this chapter is to report the findings obtained from the attitude data. Four questionnaire items relating to job expectations, job aspirations, achievement motivation and achievement orientation elicited information with respect to the attitudes of high school boys toward their future vocations. Inspection of the attitude data pointed up the tendency of the data to assume a random pattern. Chi square tests were applied but the findings were not significant. As an alternative the data were reported as percentages and a trend analysis was carried out.

II. JOB EXPECTATION ATTITUDE

The distribution of replies to the questionnaire item, "What is the one thing you would most like in a job?" is shown in Table XXVI.

Of the eight alternative replies to the questionnaire item, three replies were selected by 90.4 per cent of the students, "a secure future," "a chance to do what I am really good at," and "a chance to get ahead if I work hard," were chosen, respectively, by 46 per cent, 23.8 per cent, and 20.6 per cent of the sample. Of the remaining 9.6 per cent of the sample, 4.2 per cent selected "a chance to help others."

Job Expectation Attitude by Grade

Table XXVII shows the distribution of replies by grade level. The five categories of responses that constituted 9.6 per cent of the sample have been excluded from further analyses because of the low frequency of the replies. Two trends were evident in the data. Over the four-year high school period the percentage of students choosing "a secure future as the one thing most liked in a job" declined from 51.3 per cent at the grade nine level to 40.4 per cent at the grade twelve level. On the other hand, the percentages of students choosing "a chance to do what I am really good at" increased over the four-year period from 19.5 per cent to 29.3 per cent. The percentages of students choosing "a chance to do what I am really good at" showed little variation, decreasing slightly from 18.9 per cent ot 17.7 per cent over the four years.

III. JOB ASPIRATION ATTITUDE

The distribution of replies to the questionnaire item, "What is the one thing you would most like to get out of a job?" is shown in Table XXVIII.

"A sense of accomplishment" was selected by the highest percentage of the sample as being the "one thing they would most like to get out of a job." "A sense of security," "money," "worthwhile," "respect of others," and "independence," were selected by proportionately smaller numbers of students.

Job Aspirations Attitude by Grade

Table XXIX shows the distribution of replies by grade level.

TABLE XXVI

JOB EXPECTATION ATTITUDE OF HIGH SCHOOL BOYS: BY PERCENTAGES

Attitude	Percentage of The Sample	Number of Respondents
Secure future	46	505
Really good at	23.8	261
Chance to get ahead	20.6	226
Help others	4.2	45
Organize things	1.8	20
Friendly people	1.6	17
Low pressure	1.0	11
Vacations	0.5	5
No reply	0.5	5
Totals	100.0	1,095

TABLE XXVII

JOB EXPECTATION ATTITUDE BY GRADE: BY PERCENTAGES

Grade	Secure Future	Really Good At	Chance to Get Ahead	Number of Respondents
9	51.3	19.5	18.9	339
10	47.1	22.6	22.0	322
11	41.5	27.0	22.8	236
12	40.4	29.3	17.7	198
Totals	46.0	23.8	20.6	1,095

TABLE XXVIII

JOB ASPIRATION ATTITUDE OF HIGH SCHOOL BOYS: BY PERCENTAGES

Attitude	Percentage of The Sample	Number of Respondents
Sense of accomplishment	29.9	329
Sense of security	18.5	203
Money	16.8	185
Worthwhile	16.7	183
Respect of others	10.5	115
Independence	6.9	76
No reply	0.7	4
Totals	100.0	1,095

TABLE XXIX

JOB ASPIRATION ATTITUDE BY GRADE: BY PERCENTAGES

Grade	Respect	Money	Accomplishment	Security	Worthwhile	Independence	Number of Respon.
9	14.1	16.3	30.9	17.6	15.9	4.8	339
10	10.5	18.3	28.2	18.4	16.4	8.1	322
11	5.5	16.7	32.8	19.9	18.3	6.4	236
12	11.0	16.2	28.8	18.2	16.7	9.1	198
Totals	10.5	16.8	29.9	18.5	16.7	6.9	1,095

There was little variation in the job aspiration attitude of the students over the four-year high school period. One exception to this observation may be noted; the percentage of students who selected "independence" as the one thing that they would most like to get out of a job, increased from 4.8 per cent at the grade nine level to 9.1 per cent at the grade twelve level.

IV. ACHIEVEMENT MOTIVATION ATTITUDE

The distribution of replies to the questionnaire item, "What are you most interested in when it comes to getting ahead?" is shown in Table XXX.

TABLE XXX

ACHIEVEMENT MOTIVATION ATTITUDE OF HIGH SCHOOL BOYS: BY PERCENTAGES

Attitude	Percentage of The Sample	Number of Respondents
Security	36.9	403
Advancement	27.0	297
Income	12.2	134
Help others	10.6	116
Higher standards	6.4	70
Influence	6.2	67
No reply	0.7	8
Totals	100.0	1,095

The highest percentage of students selected "security for myself and my family" as the thing they were most interested in when it comes "to getting ahead." "Advancement in my career," was selected by 27 per cent of the students while "income," "a desire to help others," "higher standards in the community," and "influence" were selected by proportionately smaller numbers of students.

Achievement Motivation Attitude by Grade

Table XXXI shows the distribution of replies by grade level.

TABLE XXXI

ACHIEVEMENT MOTIVATION ATTITUDE BY GRADE: BY PERCENTAGES

Grade	Higher Standard	Influence	Income	Help Others	Advancement	Security	Number of Respondents
9	10.0	6.2	10.0	12.3	26.9	35.6	339
10	5.3	5.6	10.9	10.4	30.1	37.7	322
11	5.1	6.8	14.8	9.7	25.8	37.8	236
12	3.5	6.1	15.2	9.1	26.8	39.3	198
Totals	6.4	6.2	12.2	10.6	27.0	36.9	1,095

Three trends were evident in the data. The percentage of students who selected "a higher standard in the community as the one thing they were most interested in when it comes to getting ahead" declined over the four-year high school period from ten per cent at the grade nine level to 3.5 per cent at the grade twelve level. The percentage of students who selected "income" increased from ten per cent at the grade nine level to 15.2 per cent at the grade twelve level. The

percentages of students who selected "a desire to help others" declined from 12.3 per cent at the grade nine level to 9.1 per cent at the grade twelve level.

V. ACHIEVEMENT ORIENTATION ATTITUDE

The distribution of replies to the questionnaire item, "What do you think gets a person ahead fastest to-day?" is shown in Table XXXII.

TABLE XXXII

ACHIEVEMENT ORIENTATION ATTITUDE OF HIGH SCHOOL BOYS: BY PERCENTAGES

Attitude	Percentage of The Sample	Number of Respondents
Hard work	64.6	710
Brains	17.6	193
Right people	9.9	109
Pleasant personality	6.4	70
No reply	0.8	6
Politician	0.4	4
Good luck	0.3	3
Totals	100.0	1,095

The highest percentage of students selected "hard work as the one thing that gets you ahead the fastest to-day," "brains," "knowing the right people," and a "pleasant personality" were chosen, respectively, by 17.6 per cent, 9.9 per cent and 6.4 per cent of the students.

Achievement Orientation Attitude by Grade

Table XXXIII shows the distribution of replies by grade level. The categories of "being a good politician" and "good luck" have been excluded from the Table because of the low frequency of the replies.

TABLE XXXIII

ACHIEVEMENT ORIENTATION ATTITUDE BY GRADE: BY PERCENTAGES

Grade	Hard Work	Pleasant Personality	Brains	Right People	Number of Respondents
9	73.8	4.7	15.9	4.4	339
10	62.9	7.1	18.4	11.5	322
11	58.4	7.6	21.2	10.6	236
12	59.6	6.1	16.2	16.2	198
Totals	64.6	6.4	17.6	9.9	1,095

Two trends were noted in the data. The percentage of students selecting "hard work as the one thing that gets you ahead fastest to-day" declined over the four-year period from 73.8 per cent at the grade nine level to 59.6 per cent at the grade twelve level. The percentage of students selecting "knowing the right people" increased from 4.4 per cent to 16.2 per cent over the four-year high school period.

VI. ATTITUDES AND VOCATIONAL CHOICE

Consideration was given to the relationships between the respective attitude replies and the vocational choices made by the students.

A trend analysis of these relationships was carried out. No significant trends were evident from this analysis.

VII. SUMMARY OF FINDINGS

1. The replies to the four questionnaire items relating to attitudes indicated:

   a) The highest percentage of students chose "security as the one thing that they would most like in a job."

   b) The highest percentage of students chose "security as the one thing they were most interested in when it comes to getting ahead."

   c) The highest percentage of students chose "a sense of accomplishment as the one thing they would most like to get out of a job."

   d) The highest percentage of students chose "hard work as the one thing that gets you ahead fastest to-day."

2. Certain trends were evident in the replies of the students over the four-year high school period:

   a) The percentage of students who chose "a secure future as the one thing most liked in a job" declined over the four-year period.

   b) The percentage of students who chose a "chance to do what I am really good at as the one thing most liked in a job" increased over the four-year period.

   c) The percentage of students who chose "independence as the one thing they would most like to get out of a job" increased over the four-year period.

d) The percentage of students who chose "a higher standard in the community as the one thing they were most interested in when it comes to getting ahead" declined over the four-year period.

e) The percentage of students who chose "income as the one thing they were most interested in when it comes to getting ahead" increased over the four-year period.

f) The percentage of students who chose "a desire to help others as the one thing they were most interested in when it comes to getting ahead" declined over the four-year period.

g) The percentage of students who chose "hard work as the one thing that gets you ahead fastest to-day" declined over the four-year period.

h) The percentage of students who chose "knowing the right people as the one thing that gets you ahead fastest to-day" increased over the four-year period.

3. An analysis of vocational choices, when controlled by student attitudes, failed to reveal any significant trends.

CHAPTER VIII

INTERPRETATION OF THE FINDINGS

I. INTRODUCTION

The purpose of this chapter is to interpret the findings with respect to: vocational maturity, the relationships between selected situational and attitude variables, and vocational choices, in the light of the theory and related literature reported in Chapters I and II of the study.

II. VOCATIONAL MATURITY

In this section the consistency/inconsistency with which high school students made their occupational choices, and the relationship between consistency/inconsistency and certain selected variables will be interpreted.

Consistency/Inconsistency of Occupational Choice

The theory of vocational maturity suggested that the adolescent period of "tentative" choices was characterized by "increasing consistency of vocational preference."[1] Moreover, Super suggested that consistency of vocational preference could be considered as one determinant of vocational maturity.[2] This study employed Super's theory in defining a

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[1] D. E. Super, J. O. Crites, R. C. Hummel, H. P. Moser, P. L. Overstreet and C. F. Warnath, Vocational Development (New York: Bureau of Publications, Teachers' College, Columbia University, 1957), p. 188.

[2] D. E. Super and P. L. Overstreet, The Vocational Maturity of Ninth Grade Boys (New York: Bureau of Publications, Teachers' College, Columbia University, 1960), p. 187.

vocationally mature individual as one who was consistent in making two occupational choices from the same occupational group.

The findings as reported in Table III, page 33, did not indicate "increasing consistency of vocational preference." Rather, over the first three years of high school, the converse appeared to be indicated. Quite possibly the reason for the decline in the percentage of consistent students over the first three years of high school is related to what Ginzberg and his associates termed "the narrowing of the gap between the student's role and his future goal." During the years when the student is in grades ten and eleven there may be considerable adjustment and searching for an appropriate basis upon which to make an occupational choice. The student may be taking into account more of the variables that influence his plans for the future and this may explain the low percentage of students who were consistent in their occupational choices.

The percentage of consistent students increased slightly at the grade twelve level over that observed at the grade eleven level. This increase might be indicative of a trend toward stability in preferences at this particular grade level. Further research would be required to verify this trend.

Selected Variables and Vocational Maturity

The research reported by Holden coupled with the low percentage of consistent students observed in this study prompted further investigation of variables that might be related to consistency/inconsistency

in occupational choice.[3]

The findings reported in Table V, page 35, indicated a relationship between the educational background of the mother and the consistency with which occupational choices were made by her son. A higher proportion of consistent students came from homes where the mother had a partial, or complete grade school education. Moreover, the findings reported in Table VI, page 36, indicated a lower percentage of consistent students planned to attend university. In both of these instances the differences between the proportions of consistent and inconsistent students were statistically significant. No significant differences were found between the proportions of consistent and inconsistent students who were science oriented or who came from homes where the father had a partial, or complete grade school education.

These findings suggest a complex relationship between vocational maturity, as indicated by consistency in choosing occupations, and the home environment of the student. The consistent students, in higher percentages, came from homes where the mother had a grade school education or less. It is possible that in this type of home, there was not a broad awareness of occupational opportunities and thus the occupational selections that were made by the consistent students were confined to a narrow range. Furthermore, the low percentage of consistent students who indicated that they planned to attend university might also be related to the home environment. Coming from homes where the mother has a grade school education, or less, might tend to limit the university aspirations

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[3] G. S. Holden, "Scholastic Apptitude and the Relative Persistence of Vocational Preference," Personnel and Guidance Journal, XL (September, 1961), 36-41.

of the sons. Further research could explore these possibilities and in so doing could provide more information on consistency of vocational preference and vocational maturity.

III. SITUATIONAL VARIABLES AND VOCATIONAL DEVELOPMENT

In this section the relationship between the situational variables: grade level, school, father's education, mother's education and father's occupation, and vocational choice will be interpreted.

Grade and Vocational Choice

Although no significant relationship was found between the grade level of the student and vocational choice, certain trends were observed in the data reported in Tables VIII, IX and X, pages 40, 41, and 42. Grade nine students showed more indecision in making their vocational choices than was the case at the grade twelve level. The high percentages of undecided and no reply responses at the grade nine level may imply that the grade nine student has not yet reached the stage of vocational development where he is aware of the vocational opportunities, or of his own capacities in relation to the requirements of the vocations.

In one particular instance, the data indicated a high percentage of indecision at all grade levels. The high percentage of students who were undecided in choosing an university program implies a possible lack of understanding on the part of the students as to the meaning of the different university programs included in this particular questionnaire item.

In the selection of occupations and university programs the

students showed similar interests. The highest percentages of students chose technical, science and general cultural occupations, and engineering, science, education and pre-med university programs. The occupational classification used in the study included engineering, science and education, respectively, in the above-named occupational groups. Pre-med was included in the science group. The fact that technical and science occupations and programs were chosen by the highest percentages of students should be considered with regard to the fact that only male students were involved in the study. These findings do suggest a relationship between the social and educational emphasis on these fields of endeavor and the students' tendencies to select occupations and university programs from these areas.

School and Vocational Choice

The data reported in Tables XI, XII and XIII, pages 44, 45 and 49 indicated a number of significant relationships between the school attended by the student and his vocational preferences.

The analysis of the data showed that a higher proportion of students attending school "G" chose a technical occupation and a lower porportion of students chose a science occupation than was the case in the other schools. This finding appears to be congruent with that reported by Lipsett.[4] School "G" was a technical school, and although this school did offer an academic program, it would appear from the data that there is a relationship between attending a technical school

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[4] L. Lipsett, "Social Factors in Vocational Development," Personnel and Guidance Journal, XL (January, 1962), 432-437.

and choosing a technical rather than a science occupation. Moreover, higher percentages of students attending the technical school did not plan to attend university, or were undecided, and a lower percentage planned to attend university than was the case in the other schools. Lipsett's suggestion that attendance at a technical school tends to limit the aspirations of the student would appear to be applicable to the findings in this study.

Certain other data implied a relationship between the socio-economic area wherein the school was located and the university aspirations of the students. A higher percentage of students attending school "B" did not plan to attend university than was the case in the other schools. School "B" was located in an older residential "working class" area where the homes can be described as "low-cost" tract homes. The area was circumjacent to the business and industrial areas of the city. Higher percentages of students attending schools "A" and "E" planned to attend university than was the case with respect to the other schools. School "A" was built four years prior to the gathering of the data and was located in a "middle class" area. School "E" was located in the university area of Saskatoon. Furthermore, at schools "A" and "E" lower percentages of students did not plan to attend university than was the case with respect to the other schools.

A significant relationship was found between attending a private boys' parochial school (school "F") and university aspirations. A higher percentage of students from this school planned to attend university and a lower percentage of students were undecided than was the case with respect to the other schools.

With respect to choice of an university program, one significant relationship was found. At school "H", located in the "middle class" area and opened in the same year as that in which the data were gathered, a higher percentage of students was undecided in their choice of an university program than was the case with respect to the other schools. An explanation for this finding is found in the fact that no grade twelve students attended school "H" at the time the data were gathered. Had grade twelve students been in attendance it is possible that the percentage of "undecided" students would have been lower.

Father's Education and Vocational Choice

The data reported in Tables XIV, XV, and XVI, pages 51, 54, and 57 indicated several significant relationships between the educational background of the father and vocational choice. These relationships were particularly evident when the two extreme types of educational background were considered.

A higher percentage of students, from homes where the father had a partial, or complete grade school education, planned to enter technical, rather than science, or general cultural occupations. A lower percentage of these students planned to attend university, and a higher percentage did not plan to attend university than was the case with respect to the other students. At the other extreme, a lower percentage of students, from homes where the father had attended graduate school, planned to enter a technical occupation. A higher percentage of students, from homes where the father had a university education, planned to attend university and lower percentages of students did not plan to attend, or were undecided than was the case with respect to the other students. These findings, particularly with reference to the

university aspirations of the students appear to lend supporting evidence to the research reported by Ezell and Tate.[5]

Mother's Education and Vocational Choice

The significant relationships found between the educational background of the mother and vocational choice appear to support also the theory that parental educational background is related to the vocational aspirations of the children. As suggested by the Atkinson study[6] university aspirations, in particular, seem to be related to parents' education.

The data reported in Tables XVII, XVIII and XIX, pages 58, 60 and 62, indicated that the students from homes where the mother had a partial or complete grade school education chose technical occupations, and did not plan to attend university in higher percentages than was the case with respect to the other students. A lower percentage of these students planned to attend university. Students from homes where the mother had an university education chose general cultural occupations and planned to attend university in higher percentages than was the case with respect to the other students. A lower percentage of these students did not plan to attend university. The finding with respect to the relationship between an university educated mother and the son's choice of a general cultural occupation warrants further research. It

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[5] L. B. Ezell and H. H. Tate, "High School Students Look to the Future," Journal of Educational Research, XLIX (November, 1955), 217-22.

[6] W. G. Flemming, Ontario Grade Thirteen Students: Who Are They and What Happens to Them (Toronto: Department of Educational Research, Ontario College of Education, University of Toronto, 1957), p. 21.

may be that the university educated mother was employed as a teacher and the son who chose a general cultural occupation did in fact select teaching which was included in that occupational group. However, evidence to support this possibility was not incorporated in the study.

Father's Occupation and Vocational Choice

The data reported in Tables XX, XXI and XXII, pages 63, 66 and 70 indicated a number of significant relationships between the occupation of the father and the vocational choices made by the son. The findings in these respects were similar to those reported by Stephenson[7] and Krippner.[8]

Higher percentages of students who chose service, organization, and science-technical occupations, came from homes where the father was employed in these occupations. With respect to the university aspirations of the sons it is of particular interest to note the aspirations of students who came from homes where the father was employed as a laborer and the aspirations of students who came from homes where the father was employed in a science occupation. Students from the latter type of home planned to attend university in higher percentages; did not plan to attend university, or were undecided in lower percentages than was the case with respect to the other students. The converse of these findings was found when the students, from homes where the father was employed as a laborer, were considered. A higher percentage of

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[7] R. M. Stephenson, "Occupational Aspirations and Plans of Ninth Graders," Journal of Educational Research, XLIX (September, 1955), 27-35.

[8] S. Krippner, "Junior High School Students' Vocational Preferences and The Parents' Occupational Levels," Personnel and Guidance Journal, XLI (March, 1963), 590-95.

these students did not plan to attend university; a lower percentage planned to attend university. Two other significant relationships were observed. A lower percentage of students from homes where the father was employed in an organization, primarily business, did not plan to attend university. A higher proportion of students from homes where the father was employed in a technical occupation did not plan to attend university. A possible explanation of these two diverse findings may lie in the home environment of the respective students. Students from homes where the father was engaged in private business may be encouraged to aspire to an university education whereas students from homes where the father was employed in skilled labor trades may not receive this encouragement to the same degree.

IV. IDEAL ORIENTATION AND VOCATIONAL CHOICE

The percentages of students choosing the respective ideal occupations were similar to those reported by Coleman in his study of the adolescent society.[9] In Coleman's study, athletes, jet pilots and scientists were, respectively, the first three choices of the highest percentage of students. In this study, the highest percentage of students chose athletes. Jet pilots and scientists were chosen by the second highest percentage of students.

In this section the relationship between the ideal orientation of the student and the vocational choices made by the student will be interpreted.

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[9] J. S. Coleman, The Adolescent Society (New York: The Free Press of Glencoe, 1961), pp. 27-28.

Ideal Orientation and Occupational Choice

The data reported in Table XXIII, page 77, indicated a number of significant relationships between what the student would like to be ideally and the occupation that he planned to enter. In each case, when the student was controlled on his ideal orientation, occupational choices were made from the occupational group paralleling their ideal choice.

The jet pilot oriented students chose occupations from the service and technical groups. The service group included pilots and armed service personnel. Athletically oriented students chose occupations from the group which included athletics, the arts. Missionary-teacher oriented students chose occupations from the general cultural group which included missionaries, teachers and related personnel. Science oriented students chose occupations from the science group. Artistically oriented students chose occupations from the arts group. Conversely, the students tended not to choose occupations that were not similar to their ideal choices.

Ideal Orientation and University Plans

The significant relationships reported in Table XXIV, page 84, with respect to ideal orientation and university plans indicated that the university aspirations of the science oriented student tended to be higher than those of the jet pilot oriented student. A higher percentage of science oriented students planned to attend university; a lower percentage did not plan to attend than was the case with respect to the other students. The converse of these findings was found to be the case with respect to the jet pilot oriented student. Possibly the jet pilot

oriented student aspires to the type of education provided in a technical school rather than in an university. The artistically oriented student indicated more indecision in his university plans than was the case with respect to the other students. It may be that this indecision reflects a lack of understanding with respect to the possibilities that the university offers the artistically inclined student.

Ideal Orientation and University Program

The data reported in Table XXV, page 88, indicated similar relationships between what a student ideally wanted to be and the university program that he planned to pursue. Jet pilot oriented students chose engineering programs. Missionary-teacher oriented students chose education. Science oriented students chose science programs. Certain other findings were not so obvious in their interpretation. Athletically oriented students tended to be more indecisive in their choice of a program and to be less interested in science than was the case with respect to the other students. Given the fact that the highest percentage of students were athletically oriented it might be fruitful to conduct further research in the area of attempting to identify more clearly the athletically oriented students.

V. ATTITUDES

In this section the findings with respect to the vocational attitudes of the students will be interpreted. The data reported in Tables XXVI, XXVIII, XXX, and XXXII, pages 95, 96, 97, and 99, indicated that the vocational attitudes of the students were characterized by a desire for security, a desire for a vocation that would provide a

sense of accomplishment, and an ambition to work hard in order to achieve success. A trend analysis of the attitudes over the four-year high school period provided some information with respect to the changes that take place in adolescent attitudes during the high school period.

Attitude Trends During the High School Years

Based on the theory of vocational development as stated by Ginzberg and his associates[10] it was hypothesized that as a student progresses through high school he tends to show more concern for his capacities, values and realism in making vocational decisions. Although the attitude data were not amenable to the tests employed in the study certain trends in the data implied that as a student reached grades eleven and twelve he tended to become more aware of his capacities to do a job, and to exhibit more realism in his attitudes toward work than was the case at the grade nine level.

The data reported in Table XXVII, page 95, provides some evidence in support of the hypothesis. Over the four-year high school period the students tended to show less concern for an occupation that would provide security and more concern for an occupation that they could perform well. In Tables XXXI and XXXIII, pages 98 and 100, there are trends to suggest that students become increasingly realistic as they approach the time when they will leave school and enter their respective vocations. At the grade nine and ten levels the students indicated that their achievement motivation and orientation was related to their desire to help others, their desire to bring about a higher standard of living

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[10] E. Ginzberg, S. W. Ginzberg, S. Axelrod and J. L. Herma, _Occupational Choice_ (New York: Columbia University Press, 1951), p. 74.

in their community, and an ambition to work hard in order to achieve success. Over the grade eleven and twelve period the percentage of students harbouring these attitudes declined. At the same time, there was an increase in the percentage of students who considered a high income and knowing the right people as the factors aiding an individual in his pursuit of success. It is suggested that this increased awareness on the part of the students, as they grow older, of the importance of knowing the right people and earning a good salary is indicative of a more realistic outlook on the society in which they live.

VI. SUMMARY

1. There was no indication that high school students become increasingly consistent in their occupational choices over the four-year high school period. Rather, there was an indication that the students tended to be inconsistent in their choices over this period.
2. Significant relationships were indicated between: the educational background of the mother and consistency of vocational preference, university aspirations and consistency of vocational preference.
3. There was a trend toward more indecision in making vocational choices at the grade nine level than at the grade twelve level.
4. Technical, science, general cultural occupations, and engineering, science, education and pre-med university programs were the predominate vocational preferences of the students.
5. School, father's education, mother's education and father's occupation were related significantly to the vocational choices of

the students.

6. What a student chose to be ideally and what he planned to be in practice were related significantly.
7. Of the variables employed in the study, only ideal orientation was related significantly to the student's choice of an university program.
8. A trend analysis of the attitude variables indicated trends toward concern for individual capacities and increasing realism as the student progressed through high school.

CHAPTER IX

SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

I. INTRODUCTION

The concluding chapter of this study provides a summary of the study and notes certain implications for the school administrator arising from the findings reported previously. Recommendations for further research in the areas of vocational maturity and vocational development conclude the chapter.

II. SUMMARY

Purposes

The major purposes of the study were two-fold in design. The theory of vocational maturity suggested that one determinant of vocational maturity was the consistency with which adolescent students made two occupational choices from the same occupational group. At each of the four high school grade levels the students were asked to state the two occupations that they would like to enter after leaving school. The occupational selections and proportions of students who chose/did not choose two occupations from the same occupational group were determined.

The second major purpose of the study was to ascertain relationships between vocational preferences, and selected situational and attitude variables. Vocational preferences included: occupational choices, university aspirations, and choice of an university program. The situational variables included: grade, school, father's education

mother's education, and father's occupation. The attitude variables included: ideal orientation, job expectation, job aspiration, achievement motivation, and achievement orientation. The theories of vocational development as stated by Ginzberg and his associates, and Super and his associates constituted the basis upon which the selection and analysis of the variables were made.

Hypotheses

Ten major hypotheses were incorporated in the study. Four of the hypotheses were designed to test the theory of vocational maturity, and the remaining six were developed to test the theory of vocational development. Of the four hypotheses relating to vocational maturity the findings indicated that consistency of vocational choice was related to the educational background of the mother, and that consistency was related to plans to attend university. With respect to the relationships between vocational choice and the variables employed, the findings indicated that only in regard to the relationship between the grade level of the student and vocational choice was the hypothesis rejected.

Instrumentation and Methodology

The data used in the study was obtained from the "Saskatoon High School Study." The sample consisted of 1,095 male students in attendance at eight Saskatoon collegiates. The questionnaire included ninety-six items of which fifteen were pertinent to the purposes of this study. The data were coded and punched on I.B.M. cards and mechanically sorted. The results were tabulated, both in observed and expected frequencies, and percentages. Chi square tests of independence

in contingency tables and chi square tests of significance of difference between independent proportions were used to test the hypotheses. Where it was not possible to use chi square tests, the data were subjected to trend analysis.

Results

Inconsistency, rather than consistency, characterized the occupational choices of the majority of high school students. Inconsistency in making occupational choices increased during the first three years of high school, and at the grade twelve level a higher percentage of students were inconsistent than at the grade nine level. Significant relationships were found between: consistency in making choices and the education of the mother, consistency in making choices and university aspirations.

The percentages of students who were undecided, or who did not make vocational choices declined progressively over the four-year high school period. Students exhibited the most indecision in choosing university programs.

Attendance at a particular school was related significantly to the occupational choices and university aspirations of the students.

The educational background of the parents was related significantly to the occupational choices and university aspirations of the students. This finding was particularly evident when the vocational choices of students from homes where the parents had partial, or complete grade school educations were compared to the choices of students from homes where the parents had attended university.

The occupation of the father was related significantly to the

occupational choices and university aspirations of the students.

There was a significant relationship between what a student wanted to be ideally, and what he planned to do upon leaving school. This finding was evident with respect to the occupational plans, university aspirations and choice of an university program made by the student.

Certain attitude trends gave evidence of a similarity between the findings of this study and the theory of vocational development as stated by Ginzberg.

III. IMPLICATIONS FOR THE SCHOOL ADMINISTRATOR

The inconsistency of the students in making occupational choices may have implications for the school administrator in establishing an effective guidance program. The findings of this study indicate that inconsistency characterizes the choices of the majority of high school students and that inconsistency is most prevalent during the grade ten and eleven period. The suggestion was made that this inconsistency may stem from an increased awareness of occupational opportunities. Furthermore, the replies to certain attitude items indicate that as a student progresses through high school he tends to exhibit an increased concern for his individual capacities. Taking both of these findings into consideration it is possible that this increased awareness of opportunities and increased concern for one's capacities may be related to inconsistency. If this should be the case, it would appear advisable to give attention to career guidance throughout the high school period.

The significant relationship found between the school attended by the pupil and vocational aspirations implied that the school may

influence the vocational decisions that are made. In the technical school, and school "B", located in a lower socio-economic area there was evidence to suggest that provisions should be made within the guidance program to encourage broader awareness of career opportunities. At the same time, the data indicated that students from the parochial school and the schools located in higher socio-economic areas tended to have higher career aspirations, particularly with respect to their university plans.

The influence of the home environment may be of particular concern to those responsible for student counselling. There was an apparent difference between the aspirations of students from homes where the parents had a grade school education, or less, and the aspirations of students from homes where the parents had attended university. The aspirations of the former group, particularly with respect to their university plans appeared to be considerably lower than those of the students who came from homes where the parents had attended university. Possibly the home environment tends to influence the student to aspire to the level achieved by the parent. Further evidence of this is found with respect to the relationship between the occupation of the father and career aspirations. Students from service, organization and science-technical home backgrounds tended to choose the same occupations as their fathers. With respect to university aspirations, the aspirations of students who came from homes where the father was employed as a laborer were lower than those of any other group of students. Conversely, students from homes where the father was employed in a science occupation exhibited higher university aspirations.

The data, with respect to the ideal orientation of the student, implies a possible need on the part of guidance specialists, teachers, and administraotrs alike to understand what may be termed the "hero" orientation of the students, the data indicated that what a student wanted to be ideally was related significantly to what he planned to be in practice.

The attitude trends, noted, may be of practical value in terms of understanding the attitude changes that seem to characterize adolescent development. A concern for one's capacities and increasing realism in viewing the world of work may be influential factors in determining the vocational choice that is made.

IV. RECOMMENDATIONS FOR FURTHER STUDY

The major recommendation is influenced by four limitations in the present study. In this study, cross sectional data were used. Second, the occupational classification employed did not lend itself to parametric statistics. Third, the study was confined to male high school students. Fourth, data pertaining to the intelligence quotients of the students were not available. It is recommended that further research in the area of this study should consider the possibility of obtaining longitudinal data, strengthening the statistical tests by employing parametric statistics, incorporating female students in the sample, and securing intelligence quotient data which would provide valuable information.

A study that would examine more closely the theory of vocational maturity would prove worthwhile. Such a study could undertake the

examination of the characteristics, including consistency of choice, that distinguish the vocationally mature from the vocationally immature.

The data reported with respect to the situational variables that were related to vocational choice opens up avenues for probing deeper into the significance of these relationships. A step in this direction could be taken by attempting to identify more specifically the home environment of the students and relating this to vocational aspirations.

A final recommendation is based on the attitude trends noted in this study. A refined vocational attitude study involving data that could be tested statistically should prove valuable in determining more clearly the psychological processes involved in vocational decision-making.

BIBLIOGRAPHY

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A. BOOKS

Barry, R. and S. Wolf. *An Epitaph for Vocational Guidance*. New York: Bureau of Publications, Teachers' College, Columbia University, 1962.

Campbell, R. F., J. E. Corbally, Jrs., and J. A. Rameseyer. *Introduction to Education Administration*. Boston: Allyn and Bacon, Inc., 1i62.

Coleman, J. S. *The Adolescent Society*. New York: The Free Press of Glencoe, 1961.

Ferguson, G. A. *Statistical Analysis in Psychology and Education*. Toronto: McGraw-Hill Book Company, Inc., 1959.

Flemming, W. G. *Ontario Grade Thirteen Students: Who Are They and What Happens to Them*. Toronto: Department of Educational Research, Ontario College of Education, University of Toronto, 1957.

Fryer, D. *The Measurement of Interest*. New York: Henry Holt and Company, 1931.

Ginzberg, E., S. W. Ginzberg, S. Axelrad and J. L. Herma. *Occupational Choice*. New York: Columbia University Press, 1951.

Hollingshead, A. B. *Elmtown's Youth*. New York: John Wiley and Sons, Inc., 1959.

Roe, A. *The Psychology of Occupations*. New York: John Wiley and Sons, Inc., 1956.

Super, D. E., J. O. Crites, R. C. Hummel, H. P. Moser, P. L. Overstreet, and C. F. Warnath. *Vocational Development*. New York: Bureau of Publications, Teachers' College, Columbia University, 1957.

_______ and P. L. Overstreet. *The Vocational Maturity of Ninth-Grade Boys*. New York: Bureau of Publications, Teachers' College, Columbia University, 1960.

_______, R. Starishevsky and N. Matlin, and J. P. Jordaan. *Career Development: Self-Concept Theory*. New Jersey: College Entrance Examination Board, 1963.

Tiedeman, D. V. and R. P. O'Hara. *Career Development: Choice and Adjustment*. New Jersey: College Entrance Examination Board, 1963.

B. PERIODICALS

Ezell, L. B. and H. H. Tate. "High School Students Look to the Future," *Journal of Educational Research*, 49 (November, 1955), pp. 217-222.

Holden, G. S. "Scholastic Aptitude and the Relative Persistence of Vocational Choice," *Personnel and Guidance Journal*, 40 (September, 1961), pp. 36-41.

Krippner, S. "Junior High School Students' Vocational Preferences and Their Parents' Occupational Levels," *Personnel and Guidance Journal*, 41 (March, 1963), pp. 590-595.

Krozer, R., and C. M. Louttit. "The Influence of Father's Occupation on the Vocational Choices of High School Boys," *Journal of Applied Psychology*, 19 (March, 1935), pp. 203-212.

Lipsett, L. "Social Factors in Vocational Development," *Personnel and Guidance Journal*, 40 (January, 1962), pp. 432-437.

Miller, C. H. "Occupational Choice and Values," *Personnel and Guidance Journal*, 35 (December, 1956), pp. 244-246.

Schmidt, J. L. and J. W. M. Rothney. "Variability of Vocational Choices of High School Students," *Personnel and Guidance Journal*, 34 (November, 1955), pp. 142-146.

Stephenson, R. M. "Occupational Aspirations and Plans of Ninth-Graders," *Journal of Educational Research*, 49 (September, 1955), pp. 27-35.

C. UNPUBLISHED MATERIALS

Knill, W. D. "Television and the High School Student" (submitted to the Canadian Education Association, 1963), 87 pages. (Mimeographed.)

APPENDIX A

APPENDIX A

Those items selected from the Saskatoon High School Study Questionnaire used in this project.

QUESTIONNAIRE

Directions: Beside each response you will find two letters, or a number and a latter, or two numbers. Use the code letters or numbers beside the response you choose and write them in the corresponding block provided on the answer sheet. Always use lower case letters. In a few cases you are asked to place your answer directly on the answer sheet without a code, e.g., "What is your age?" ☐ years. In this case you will write your age directly in the block, e.g., 16 years. A few questions ask you to write out your answer. These will be coded by the research worker at a later date.

1. What collegiate are you attending?

Use code	
ab	Aden Bowman
br	Bedford Road
cp	City Park
cs	Convent of Sion
mr	Mount Royal
nu	Nutana
sp	St. Paul's
te	Technical
wm	Walter Murray

2. What Grade are you in?

Use code	
9	Grade nine
10	Grade ten
11	Grade eleven
12	Grade twelve

3. Sex?

Use code	
m	Male
f	Female

4,5 What is your first and second choice of occupations you would like to enter after completing your schooling

Write your choices in the spaces provided.

6. Are you planning on going to college or university after high school

Use code

yes	Yes
no	No
un	Undecided

7. What will you probably study in college or university?

Use code

un	Undecided
la	A liberal arts program
sc	A science program
ed	Education
bu	A business program
en	Engineering
ag	Agriculture
pm	Pre-medicine
pl	Pre-law

8. How much formal education did your father have?

Use code

sg	Some grade school
fg	Finished grade school
sh	Some high school
fh	Finished high school
sc	Some college
fc	Finished college
gs	Attended graduate school or professional school after college
ts	Attended a trade or technical school
dk	Don't know

9. How much formal education did your mother have?

Use code

Same choices as question 8.

10. What is your father's occupation? What does he do? Be as specific as you can. (If he is dead, say what his occupation was.)

Write your answer in the space provided.

11. Many people have different ideas about what the ideal job would be like. Here is a list of things that people have said they would like to see in a job. What is the one thing on this list that you would like most in a job?

Use code

sf	The promise of a secure future
rg	A chance to do what I am really good at
or	A chance to organize things the way I like
fr	Friendly, easy-going people to work with
lp	Not too much pressure on me to get things done
ah	A chance to get ahead if I work hard
he	A chance to help others
va	Plenty of benefits like vacations and medical care

12. Here is another list. This one has to do with things that people would like to get out of a job. What is the one thing in this list that you would most like to get out of a job?

Use code

re	The respect of others
mo	Money
ac	A sense of accomplishment
se	A sense of security
wo	A feeling of doing something worthwhile
in	A feeling of independence

13. Getting ahead in life means different things to different people. Here is a list of things that people have in mind when they say they want to get ahead in life. Which one of these things are you most interested in when it comes to getting ahead?

Use code

hi	A higher standard in the community
ab	Greater ability to influence others
in	A larger income
ot	Greater ability to help others
ad	Advancement in my job or career
se	More security for myself and my family

14. What one thing on this list, do you think, really get a person ahead the fastest today?

Use code

hw	Hard work
pp	Pleasant personality
br	Brains
rp	Knowing the right people
gl	Good luck
po	Being a good politician

15. If you could be any of these things you wanted, which would you most want to be?

Use code

Boys (jet pilot
(nationally famous athlete
(missionary
Only (teacher
(atomic scientist
(artist

	jp	Jet pilot
	at	Nationally famous athlete
Boys	mi	Missionary
	te	Teacher
Only	as	Atomic scientist
	ar	Artist

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